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CANADIAN AGRICULTURAL EXHIBITIONS[1]

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INTRODUCTION

At a meeting of the Executive of this Society which was held during the Royal Winter Fair last Fall, in order to arrange the programme for this Convention, I made the suggestion that we might profitably spend some of our time discussing Fairs and Exhibitions inasmuch as they have a very direct bearing upon the advancement of the animal industry and agriculture generally in Canada. Furthermore, I was of the opinion that this subject was one of general interest to all our members and therefore would be more acceptable than one that might be more specialized in its application.

Little did I think when I made this suggestion that I would find myself charged with the responsibility of opening the discussion at this meeting. However, last February our President and Secretary approached me with the request that I take over the Chairmanship of this Exhibition Committee inasmuch as Mr. Steckley could not see his way clear to undertake the preparation of a report such as was suggested. I was very reluctant to do so, not because of a lack of interest in or a realization of the importance of the subject, but I realized that a complete analysis of this question, embracing as it does so many governmental and professional activities, would require an enormous amount of study covering a greater period of time than I had available for the work; however, your President and Secretary held me responsible for implementing my own suggestion.

My Committee consisted of Mr. J. C. Steckley, Agricultural Representative, Brantford, Ont., and former Chairman of this Committee; Mr. G. B. Rothwell, Dominion Live Stock Commissioner; Mr. L. E. O'Neill, Ontario Live Stock Commissioner; Mr. A. Morin, Quebec Live Stock Commissioner; Mr. S. Wood, Live Stock Commissioner, New Brunswick; Mr. C. E. Boulden, Director of Agricultural Societies, Nova Scotia; and Mr. Walter Shaw, Deputy-Minister and Live Stock Superintendent, Department of Agriculture, Charlottetown, Prince Edward Island.

I have not hesitated to call upon these gentlemen for assistance and information, and I appreciate very much their prompt and courteous helpfulness. Had time permitted I should have gone farther afield and obtained the opinions of breeders, exhibitors, commercial interest and others that are closely identified with our exhibitions in innumerable ways. Also I had hoped that there might have been time to discuss this report with the members of my Committee so that it could have been submitted as a committee report. However, as these wishes could not be fulfilled I have

[1] Report of the Chairman of the Committee on Exhibitions before the Canadian Society of Animal Production (Eastern Section) at the Seventh Annual Meeting of the Society held at the University of New Brunswick, Fredericton, N.B., July 14 and 15, 1936.

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had to content myself with an analysis of the different aspects of this problem, and such comments and suggestions as are made must be considered as a basis for to-day's discussion rather than the mature recommendations of any particular group or body. Incidentally, the members of my Committee have been provided with copies of this report; so, I trust they will feel free to take a leading part in a full and comprehensive discussion of this subject.

In this study I have confined myself to Eastern Canada, except where consideration of federal policy introduces certain angles of Dominion importance.

The statement is often made to the effect that we have too many fairs and exhibitions. However, old reports of the Agriculture and Arts Association of Ontario reveal the fact that the same complaint was being voiced as early as 1865, seemingly without effect.

Undoubtedly we are spending a lot of money in this country in support of our exhibitions. I started out with the idea of presenting a definite and staggering statement including a cumulative total of public monies spent in this field, but eventually decided against it, inasmuch as I felt that as a technical society there was little we could do about this phase of the problem. On the other hand, it is our duty and responsibility as a technical organization to address ourselves towards the study of this field so that the industry of agriculture may receive full value for monies expended.

In order that I may not be held responsible for conjuring imaginary bogeys let me quote you a paragraph from a report presented to this Society at their Annual Convention held at Macdonald College two years ago. On that occasion Dr. Archibald in concluding his excellent paper on a National Cattle Policy commented thus on exhibitions:—

"Probably no one problem gives greater concern to our livestock commissioners throughout Canada than that of our exhibitions. That they have performed an enormously beneficial task of demonstrating and even introducing better breeding stock in the communities is without doubt. That they also have been responsible for distributing disease, setting false standards, failing to conform to commercial requirements and the like we all must recognize. Nevertheless, exhibitions large and small form one of our best sources of education and contact amongst livestock men. That many of the provincial governments because of financial stress have ceased to give financial aid of any sort to smaller fairs is regrettable. That many of our wealthier provinces are continuing to give aid without a clearly defined policy as to the sphere of usefulness, the classifications, and the clientele served, is perhaps equally regrettable. That there should be a very clear cut understanding between federal and provincial governments based on a sound policy of relationship between Class A, Class B and county or township fairs appears to me to be logical."

THE DEVELOPMENT OF GOVERNMENT POLICY

Let us then proceed to a study of our organization for fairs and exhibitions in this country with a view to seeing whether or not we can define a policy regarding the sphere of activity of our Dominion and Provincial Governments. First of all we will examine the organizations which receive Dominion as well as Provincial support, and then we will have a

look at the very impressive background of county and district exhibitions which cannot look further than to their respective provincial governments for financial aid.

The Dominion Government has a classification for the exhibitions which they support by which fairs are grouped as Class "A" or Class "B"; also Winter and Spring Shows are associated in a special category. To indicate the extent and distribution of the Dominion's support to exhibitions in Canada I have included four tables prepared by Mr. Hare of the Economics Branch, Dominion Department of Agriculture. For purposes of this analysis Winter and Spring Shows have been included with Class "A" Fairs inasmuch as the support which they receive is comparable. These tables show the number of fairs of each class in the Dominion and their distribution by provinces. Furthermore, in order to enable you to judge more accurately of their distribution, a percentage relationship with five important basic factors has been established. These factors are Gross Agricultural Revenue, Gross Agricultural Wealth, Area of Occupied Farms, Area of Improved Farms, and Number of Farms.

Table 1 gives the basic factors and the relative position of each province in regard to each of these. Table 2 shows the number of Class "B" Fairs in Canada and their distribution by provinces and the relationship of the basic factors to the number of fairs, by provinces. Table 3 shows the number of Class "A" Fairs, Winter and Spring Shows in the Dominion and by provinces and the relationship of the basic factors to the number of fairs, by provinces. Table 4 gives the percentage relationship of the several basic factors to federally classified fairs and exhibitions in Canada.

Little comment is necessary on this study. The Class "A" Fairs, and Winter and Spring Shows seem to be distributed more equitably than are the Class "B" Fairs, and when we consider their relationship to the several basic factors particularly to the number of farms, I think we have reason to be pleased that we find ourselves in such good shape in spite of the fact that almost everything else except a consideration of basic factors entered into the decision as to how many of these fairs we should have and where they should be held.

In order to understand the basis of the federal classification and how it came into being I propose to note briefly by way of review the various changes in policy which have taken place during the past twenty-one years.

As a war-time measure grants were made in 1915 to all exhibitions in Canada which had spent at their last preceding show at least $5,000 in prize money in the utility classes of live stock and poultry. The maximum grant which a fair might obtain was $5,000—based upon 50% of the prize money expended in the current year. All fairs had to be open to the Dominion. This is a requirement that I want you to note particularly.

The first change in this policy was in 1918 when a Summer fair was required to have spent $4,000 in prize money at its preceding show (exclusive of any federal grant received) to earn a minimum grant of $1,875. A Winter fair received special consideration, and an expenditure of $2,500 in prize money at its preceding show (exclusive of any federal grant received) qualified it for a minimum grant of $2,500. The maximum grant to Summer fairs was $3,750 and to Winter fairs $5,000. All grants were based on the preceding year's expenditures.

In 1919 all Summer exhibitions with a preceding year's expenditure of its own money of $3,600 could qualify for a minimum grant of $2,500. Amount of grant to a maximum of $5,000 was determined by expenditure at preceding show; no change in Winter fair policy.

The year 1920 saw the minimum expenditure of the fair's own money to qualify for a grant raised to $4,000; otherwise the policy was the same as for the previous year and continued so until 1922 when the axe descended and all grants to Summer fairs were cut in both minimum and maximum allowances by 25%. No change had yet been made in the Winter fair policy.

In 1923 fairs' conferences were held throughout Canada and Summer fairs were classified as "A" and "B". Class "A" Fairs comprised major exhibitions designated by the Minister of Agriculture (in collaboration with the Provincial Departments) when such fairs had agreed to a policy with respect to the introduction of commercial classes of live stock and the inclusion of educational features, through joint arrangement with the

TABLE 1.—BASIC FACTORS IN A STUDY OF FAIRS AND EXHIBITIONS IN CANADA

	Gross Agricultural Revenue, 1934		Gross Agricultural Wealth, 1934		Area of Occupied Farms, 1934		Area of Improved Farms, 1934		Number of Farms, 1934	
	000 omitted	%	000 omitted	%	Acres	%	Acres	%		%
Canada	$931,347	100	$5,608,157	100	163,114,034	100	85,732,172	100	728,623	100
P.E.I.	12,979	1	69,196	1	1,191,202	1	765,772	1	12,865	2
N.S.	26,525	3	126,378	2	4,302,031	3	844,632	1	39,444	5
N.B.	24,611	3	122,848	2	4,151,596	3	1,330,232	2	34,025	5
Que.	180,257	19	965,583	17	17,304,164	11	8,994,158	10	135,957	19
Ont.	300,348	32	1,586,015	29	22,840,898	14	13,272,986	15	192,174	26
Man.	71,735	8	431,333	8	15,131,685	9	8,521,930	10	54,199	7
Sask.	129,986	14	1,235,180	22	55,673,460	34	33,548,988	39	136,472	19
Alta.	148,593	16	882,725	16	38,977,457	23	17,748,518	21	97,408	13
B.C.	36,313	4	188,899	3	3,541,541	2	704,956	1	26,079	4

TABLE 2.—CLASS "B" FAIRS. RELATION OF BASIC FACTORS TO NUMBER OF FAIRS, BY PROVINCES

	Class B Fairs		Gross Agricultural Revenue per Fair	Gross Agricultural Wealth per Fair	Area Occupied Farms per Fair	Area Improved Farms per Fair	Number of Farms per Fair
	No.	%	000 omitted	000 omitted	Acres	Acres	
Canada	40	100	$23,286	$140,204	4,077,851	2,143,304	18,213
P.E.I.	0	0	—	—	—	—	—
N.S.	0	0	—	—	—	—	—
N.B.	2	5	12,305	61,424	2,075,798	665,116	17,012
Que.	9	23	20,028	107,287	1,922,574	999,351	15,106
Ont.	11	28	27,304	144,183	2,076,445	1,115,726	17,470
Man.	3	7	23,912	143,777	5,043,895	2,840,310	18,066
Sask.	7	18	18,569	176,454	7,953,209	4,792,712	19,496
Alta.	5	12	29,718	176,545	7,795,491	3,549,703	19,481
B.C.	3	7	12,104	62,966	1,180,513	234,985	8,693

TABLE 3.—CLASS "A" FAIRS, WINTER AND SPRING SHOWS. RELATION OF BASIC FACTORS TO NUMBERS OF FAIRS, BY PROVINCES

	"A" Fairs, Winter and Spring Shows		Gross Agricultural Revenue per Fair	Gross Agricultural Wealth per Fair	Area Occupied Farms per Fair	Area Improved Farms per Fair	Number of Farms per Fair
	No.	%	000 omitted	000 omitted	Acres	Acres	
Canada	31	100	$30,043	$180,908	5,261,743	2,765,553	23,503
P.E.I.	1	3	12,979	69,196	1,191,202	765,722	12,865
N.S.*	2	6	13,262	63,189	2,151,015	422,316	19,722
N.B.	1	3	24,611	122,848	4,151,596	1,330,232	34,025
Que.	7	23	25,751	137,940	2,472,023	1,277,736	19,422
Ont.†	7	23	42,906	226,573	3,262,985	1,896,140	27,453
Man.	2	6	35,867	215,666	7,565,842	4,260,965	27,099
Sask.	4	13	32,496	308,795	13,918,365	8,387,247	34,118
Alta.	4	13	37,148	220,681	9,744,364	4,437,104	24,352
B.C.	3	10	12,104	62,966	1,180,513	234,985	8,693

* Included Maritime Winter Fair.
† Included Canadian National Exhibition and Royal Winter Fair.

TABLE 4.—PERCENTAGE RELATIONSHIPS OF SEVERAL FACTORS TO FAIRS AND EXHIBITIONS IN CANADA

	Fairs	Gross Agr. Rev.	Gross Agr. Wealth	Area Occ'd Farms	Area Imp'd Farms	Number Farms
CLASS "B" FAIRS	%	%	%	%	%	%
Canada (100%)						
P.E.I.	0	1	1	1	1	2
N.S.	0	3	2	3	1	5
N.B.	5	3	2	3	2	5
Quebec	23	19	17	11	10	19
Ont.	28	32	29	14	15	26
Man.	7	8	8	9	10	7
Sask.	18	14	22	34	39	19
Alta.	12	16	16	23	21	13
B.C.	7	4	3	2	1	4
CLASS "A" FAIRS, WINTER AND SPRING SHOWS						
Canada (100%)						
P.E.I.	3	1	1	1	1	2
N.S.	6	3	2	3	1	5
N.B.	3	3	2	3	2	5
Que.	23	19	17	11	10	19
Ont.	23	32	29	14	15	26
Man.	6	8	8	9	10	7
Sask.	13	14	22	34	39	19
Alta.	13	16	16	23	21	13
B.C.	10	4	3	2	1	4

Dominion and Provincial Departments of Agriculture, the Fairs' Organizations and the Live Stock Associations. At the conferences above referred to, an allotment of "A" Fairs was made to each province as below:—

British Columbia	2	
Alberta	2	
Saskatchewan	2	
Manitoba	1	(With the understanding that Winnipeg Fair, if established, would also be in this category.)
Ontario	3	
Quebec	3	
New Brunswick	1	
Nova Scotia	1	
Prince Edward Island	1	
	16	

This allotment is the same to-day, with the exception of one additional Class "A" fair in each of the provinces of Ontario and Quebec. All "A" fairs received a flat annual grant (1923) of $5,000.

All other summer fairs which received one or more grants prior to 1923 were classified as "B" and were to receive in 1923 the amount of the 1922 grant, or the grant received in connection with the last preceding show. The grants were to be continued for not less than two years and not more than three years, inclusive of the 1923 grant, after which no grants were to be made to Class "B" exhibitions. I wish you would make particular note of this point.

The years 1924 and 1925 saw no change in fairs policy. In 1926, Class "B" exhibitions should have disappeared. They were not cut off, however, but received a flat grant of $1,500. No change in policy otherwise took place. We then experienced four consecutive years without a change of policy. The number of "B" fairs was increasing.

In 1931, one "B" fair in each province was selected to organize and stage a regional competition for which $1,000 was granted (in addition to the $1,500 "B" Class grant).

The year 1932 witnessed the same policy with respect to "B" fairs, but a different fair was selected in each province for a regional competition. This year, like 1922, also witnessed a major reduction in fair grants. The winter fair maximum of $5,000 was reduced to $2,500 flat and Class "A" from $5,000 to $2,500 flat.

In 1933 the winter fair grants were raised to a $3,000 maximum, and the maximum allowance for regional competitions at "B" fairs was reduced to $500. Quebec had organized a classification for regional fairs and they did not come in under the federal regional grant.

Grants to all fairs in 1934 were based on current year's expenditures with the following *maxima* applying for each class:

Summer "A"	$2,500	
Winter	3,000	
Class "B"	1,500	plus a sum up to $500 for regional competition.

The outstanding development of this year was that fairs regulations as applying to age limits for live stock, championship awards, group classes, production qualifications, health and evidence of breeding capability, breed representation, etc., became effective.

Grants were increased in 1935. Winter and Class "A" fairs could earn up to $5,000 divided as follows:—

General grant	$4,000
Grant for securing judges	500
Boys' and girls' club work	500
	$5,000

"B" fairs could earn up to $3,000:—

General	$1,800	
Regional competition	500	(except Quebec)
Judges	200	
Club work	500	
	$3,000	

This year (1936) Class "A" grants have been reduced to a $4,000 maximum, the cut of $1,000 coming off the general grant. Class "B" grants are reduced $500. (The general grant by $300, and the regional competition allowance is down $200.) Winter fair grants are the same as for 1935.

There are several general observations in regard to policy which should be noted in connection with this record. A policy of offering special prizes for draft horses, finished steers, market lambs, bacon hogs and dressed poultry at winter fairs and spring shows was inaugurated in 1919. Special prizes were also offered at a few Summer shows between 1919 and the fiscal year ended March 31st, 1932, when the policy was discontinued.

In connection with judges, it used to be the policy of the department to supply judges to winter and spring shows and Class "A" summer exhibitions, but this was discontinued at the end of the fiscal year 1931-32, since which time a grant has been made to all winter, spring and Class "A" fairs to assist in the cost of obtaining satisfactory judges. This latter policy was extended in 1935 to include assistance to all classes of fairs.

Educational exhibits have been staged at all classes of fairs in all provinces since shortly after the inception of the fairs' policy. Since the beginning of the fiscal year 1933–34 this policy has been under the direction of the Publicity and Extension Branch of the Federal Department.

Several ideas can be developed from a study of this twenty-year record of the Department's effort to develop an exhibition policy. In the first place, I think it must be apparent even to the most critical, that a sincere effort has been made to develop a policy of intelligent support equitable to the different sections of the Dominion. Furthermore, I believe it is equally apparent that the department was not always in a position to carry out their intentions in the development of this policy, as for example, their inability in 1926 to cut out the grants to Class "B" fairs which was the policy agreed upon at the several fairs' conferences held in 1923. Again commencing in 1931 when steps were taken to regionalize some of the "B"

fairs in an attempt to increase their usefulness this seems to have been met by an unprecedented extension of "B" fairs rather than an improvement of those already in existence.

The fact that the 1923 conferences established a certain allotment of major fairs for each province in Canada, which set-up has endured to the present time with very little change, is indicative that our Class "A", winter and spring show organization is probably serving very well the various sections of Canada.

The situation in regard to "B" fairs is scarcely as reassuring when we take into consideration the fact that there are only 31 major shows in Canada, while the "B" Class fairs have already reached a total of 40 with none in two of the provinces (Nova Scotia and Prince Edward Island). As one person expressed it, the business of qualifying exhibitions for the "B" fair grant is rapidly assuming the proportions of a "racket" with little or no consideration being given to opportunities for service in return for the increased money expended.

It is understood that the Dominion Department of Agriculture is at the present time reviewing the whole fair problem, and in particular, the classification of the various fairs. The determination of the rightful status of each fair is one of the first steps in the development of a sound exhibition policy.

COUNTY, TOWNSHIP AND DISTRICT EXHIBITIONS

In addition to the fairs receiving both federal and provincial support there exists a large background of county, township and district exhibitions fostered under various schemes by our respective provincial governments. In the main these are organized under the auspices of agricultural societies which are the oldest form of agricultural organization existing in Canada.

We are indebted to the late Dr. C. C. James for whatever record exists concerning the history of the first agricultural societies, as several historical articles from his pen were published in some of the earlier reports of fairs and exhibitions in Ontario. Windsor, N.S., seems to have the honour of organizing the first fair in May, 1765. About 1790, Lieutenant-Governor Carleton founded a society at St. John, N.B., while Quebec is said to have organized a Montreal society in 1788 and a Quebec society in 1789. In Ontario the first society was formed at Niagara by Governor Simcoe in 1792.

Those early agricultural societies had as their objective the promotion and development of agricultural knowledge, and they met regularly to discuss agricultural questions. They also in some cases organized an agricultural library, and as time went on developed fairs and exhibitions.

From the very beginning they enjoyed government patronage and this soon developed into provisions for their regulation and encouragement. These societies have probably played a very important part in the development of our people and in the upbuilding of the wealth of this country. To-day there exists a very impressive list of such societies holding exhibitions throughout the various provinces. I was provided with a complete list of these by the members of my Committee for their respective provinces. For the present we will just give the numbers by provinces. Prince Edward

Island has 4 district shows; New Brunswick 19 township or county fairs; Quebec has 74, of which 7 are classed by the province as regional shows; and Ontario has 299 county, township and district shows in addition to the eleven that receive aid under the federal Class "B" policy. These exhibitions all receive varying degrees of financial assistance from their respective governments all based on certain provisions in provincial legislation pertaining to agricultural societies.

Of the 4 district shows in Prince Edward Island, two receive $1,000 each, one $750, and another $400. The county or district shows in N.S. receive $500 each less $50 which the department retains for insurance with one exception where the grant is $650 less $75 for insurance.

New Brunswick confines its financial assistance entirely to the recognized county fairs of which there are six. In these cases the Department of Agriculture offers a grant amounting to 75% of the total prize money awarded up to a maximum grant of $300. These fairs in common with all fairs held under the auspices of agricultural societies are required to submit a proposed prize list for the approval of the department before the same is adopted or advertised. They must also submit a sworn statement of awards made after the fair has been concluded. In addition the Department offers special prizes at these county fairs for horses, cattle, sheep, swine, poultry, grain and vegetables.

In Quebec the grants to county shows vary in accordance with the number of members in each society, from a minimum grant of $175 to a maximum of $900. The provincial regional shows receive grants of $2,500 to $4,000 depending on their size, the population, and the live stock of the district served by the show.

In the province of Ontario no society can receive a grant exceeding $800. But what they actually receive depends on several factors, namely, whether or not they are a newly organized society or one that has owned or maintained purebred stock for its members. In one case it receives a grant based on its membership, in the other varying grants depending on the class of male stock provided. In the main, however, the grant voted for agricultural societies is expended amongst the various societies in proportion to the amount they expended during the preceding three years for agricultural purposes, as shown by their sworn statements.

I have only outlined very briefly the basis and extent of financial assistance provided to agricultural societies by the various provinces, as any attempt to review this field in detail would make this report exceedingly cumbersome and difficult to follow. For our purposes I believe that it is sufficient that we recognize that for the past hundred and forty years, the various Governments, Dominion and provincial, have regarded fairs with more than a kindly eye as a means of social progress.

It was very evidently the feeling that the agricultural society in Canada was something very necessary to the country, and because of the peculiar conditions, it became typically Canadian. The Society was the nucleus of social contact and the fair was its expansive gesture.

There is a feeling among some of the men responsible for the direction of agricultural societies, that in too many instances the Societies are not sufficiently active in providing agricultural leadership in their respective

counties throughout the year, and that there is a tendency for them to confine their activities simply to the staging of a one-, two-, or three-day fall fair. In the meantime, other types of agricultural organizations for specialized purposes seem to have been developed in numerous counties. When the question is raised as to whether or not the agricultural society could not be made to function in a broader capacity, sponsoring all the agricultural work in the community, the answer given by district representatives and provincial government men is that in many cases the local officers of the agricultural society are not interested in anything except their fair.

Mr. C. H. Hodge, Editor of *The Farmer*, Toronto, gives expression to a similar thought in an article entitled "New Life for the Agricultural Society" which appeared in the May 9th issue of *The Journal of Agriculture* this year. In the first paragraph of this article he asks: "How many agricultural societies have the same officers, doing the same jobs, in the same way, year after year? Is the answer that a society can give to that question the reason why some of them are live, active, progressive organizations, while others are societies in name only, doing the one thing—holding a one-or two-day fair every fall—with steadily dwindling support and interest on the part of their members and constantly in difficulty with their financing."

The agricultural society is the natural body to give leadership and direction in all matters pertaining to agricultural betterment in the community, but the problem seems to be to make it function on this broader basis. It is quite true that the most successful societies are those that work closely with other organizations in their community and we have in eastern Canada a considerable number of societies that, in addition to holding an annual fair, are sponsoring a wide variety of projects that are valuable to their members. The greatest variety of projects seems to be sponsored by the agricultural societies in Quebec and a quite extensive list of these appeared in an article by Brother Fleury in the May 9, 1936 issue of *The Journal of Agriculture*. In Ontario some of the most successful societies have been bringing purebred sires into their communities over a long period of years. One of the oldest and best managed societies in eastern Ontario has been securing sires for its members for sixty-eight years.

Equally valuable work is being done through agricultural societies in crop improvement by introducing new and tested varieties of seed grain. Some have gone further and established seed cleaning plants for the use of their members on such a basis that they are self-supporting.

These and many other projects are all laudable movements which can be sponsored to advantage by agricultural societies and none need detract in any measure from the annual fair which they stage, but contrarywise they should assist in staging a more complete and better balanced show reflecting a well rounded agricultural program within the community.

That local officers may in numerous instances be the stumbling block to a development of this kind is readily admitted and appreciated and there probably is no quick way in which to overcome this handicap. The situation can only be righted by developing within the community itself a clearer understanding of what the agricultural society could be made to do.

In other words we get back to the question of education, and undoubtedly some progress is being made along these lines in some of the provinces where annual meetings are held of the secretaries and officers of the agricultural societies. At these conventions the work within the province comes under review and the local officers of each society have an opportunity to learn of the excellent things that are being done by some of the organizations. These conventions seem to be accomplishing a great deal of good, more notably in the provinces of Ontario and Nova Scotia where they are regular annual events. I believe that these conventions are also productive of improved management of county and district exhibitions, as certain phases of exhibition work, including prize lists, rules and regulations, programs, etc., come under discussion with the result that what is agreed upon as the best procedure is followed more or less closely by all the shows in the province.

A notable result of this work in Nova Scotia has been to emphasize the value of programmes, and the last year's prize lists of Annapolis County or Windsor exhibitions indicate a definite attempt on the part of the show management to feature local talent in competitive sports, demonstrations and entertainment features in such a manner as to do away with the necessity of importing entertainment of questionable value at considerable cost to the society. Furthermore, the printing of a programme of events either with or supplementary to the prize list, is something which all county and district shows might emulate with profit.

One provincial government officer expressed himself as being of the opinion that exhibitions and fairs policy in Canada has from the outset been dominated by the live stock interests, which later was narrowed down to the breed associations with the result that the contact with Governments regarding grants and restrictive legislation has been through the Live Stock Commissioners except in the case of Nova Scotia and Ontario in eastern Canada where there are Superintendents of agricultural societies. This is not so much by way of criticism as it is intended as a notation of fact, for we in Canada had to work out our own method of enlarging the educational knowledge of a people pioneering a new country, and certainly stock improvement in a new and fertile country was of paramount importance; so, it is probably logical that there grew out of the old cattle shows an interest and influence that has persisted to the present day. This may be something which should be considered if it is desirable to have agricultural societies function in a broader and more influential capacity in their respective communities.

There are many detailed features for the improvement of county or district shows which could be discussed. However, having reviewed the situation in a general way I feel that for the purpose of this report it will be better to refer back to the question of exhibition policy as discussed in the first part of this paper. I propose to do this simply by raising a question commencing with the assumption that thirty-one major exhibitions in Canada receiving direct federal assistance provide equitable service to all sections of the country.

Would it then not be in the interests of exhibitions and their relationship to agriculture generally if the federal money now paid direct to "B" Class fairs was turned over to the provinces to be used by them in addition

to their own grants in furthering a county, community or district show programme of such a character as to afford the greatest opportunity for a constructive programme of agricultural betterment?

The objections to this will come from those directly interested in certain "B" Class fairs, and it is possible that some adjustment might have to be made so that some of these that have grown into exhibitions of considerable size would continue to receive direct federal aid. This adjustment might be made by enlarging the list of major shows so as to include such of the existing "B" fairs as is deemed necessary after which "B" fairs would disappear from the federal classification and we would have clear cut policy of direct federal aid to an established list of major summer winter and spring shows open to Dominion competition, and indirect federal support for county, township and district shows through the medium of grants to the provinces for this purpose.

IMPROVING THE EXHIBITION

With the remarkable growth of exhibitions in this country there have been periodic attempts on the part of different people to introduce regulations and other measures to maintain the full educational value of these shows. Early in the century the problem of expert judges was paramount, and the old reports of fairs and exhibitions in Ontario carry discussions which indicate that if this problem could be satisfactorily solved, the exhibitions might breathe again. Changes were made, better judges selected, and for a time, some of the difficulties seem to have been solved. However, growth and advancement developed new problems, or the old ones appeared in a new form.

To review historically the various incidents and events in the improvement of exhibitions can serve no useful purpose. What we are concerned with are the problems of exhibitions to-day and how they are being met. For leadership in this field we must look to our larger shows, as the rules and regulations which can be developed for improving their usefulness will react beneficially upon all junior exhibitions in the country.

For some years now one of the most effective instruments in improving fairs has been the medium of the association of fair managers. For the most part these men are anxious to do whatever is possible by way of improvement, but evidently some pressure from an outside source is appreciated, if for no other purpose than to have someone upon whom to place the burden of criticism and blame which is bound to arise when people are disturbed from an accustomed routine or practice.

This responsibility seems in the main to have fallen upon the Dominion Department of Agriculture, probably because it was in contact in a similar way with all exhibitions and was therefore in a better position to develop uniformity in practice, procedure and regulations. Such improvements, therefore, as have been effected are the result of the co-operation of fair managers with the department inasmuch as all grants to exhibitions have been subject to certain conditions which provided that the department's suggestions and recommendations were applied in principle and practice.

In so far as I can ascertain the first major movement to influence the policy of exhibitions took place in 1919 when the department, in addition

to its regular grants, offered special prizes for a comprehensive list of market classes in an attempt to secure the fairs' co-operation in limiting breeds to those most important from a commercial standpoint.

This policy was discontinued in 1932, but a specified list of breeds is still included in the regulations, and money paid out in prizes for breeds or varieties in excess of this list is not considered by the department in determining the eligibility of an exhibition for a grant, and it is suggested that the choice of breeds should be governed by their importance from a commercial standpoint in the district served by a fair.

The 1919 beginning was finally consummated in 1923 at the fairs' conferences and the designation of Class "A" fairs hinged upon their agreement to the introduction of commercial classes and the inclusion of educational features, and this policy is now a fairly well established practice at most exhibitions.

As we stand to-day, the fairs are working with the department to make effective more specific regulations governing health and evidence of breeding capacity of stock, checking of animals for identification, age limits for cattle, championship awards (for horses and cattle), group classes (in cattle and horses), production qualifications, and tampering.

I do not propose to review the regulations which have been drafted in connection with these various matters as copies of these can be secured from the Dominion Live Stock Branch, but a word or so on progress in this field may not be amiss.

First, the health question is all important and it is highly desirable that satisfactory evidence of the health of exhibition stock be available so as to reduce the possibility of spreading disease to a minimum. In so far as tuberculosis is concerned, the "A" shows are pretty well protected to-day and a great many "B" shows either insist on tested cattle only or segregate the non-tested herds. As testing for tuberculosis becomes more general, it may be possible to insist on tested stock only. County shows should endeavour to develop protection along these lines as rapidly as possible.

In regard to Bang's disease, the matter has not advanced sufficiently to afford the same general degree of protection as is the case with tuberculosis. However, the Department suggests to fair boards that their cattle committees consider the matter of segregating animals blood-tested for Bang's disease. The matter is considered of extreme importance and the department is prepared to assist fair boards in meeting this situation.

Probably one of the most important and far reaching steps taken in regard to the betterment of exhibitions is the checking of animals for identification. One of the activities of the Canadian National Live Stock Records for more than twenty-five years has been to assist many Class "A" exhibitions and winter fairs by checking the entries of live stock prior to the show with the information on file at the Records office, and also to check the returns of prize winners. As late as 1933, however, some rather bad practice was discovered which resulted in a renewed co-operative effort between the Dominion Live Stock Branch and the Records office to institute a proper control of exhibitions in this regard. The 1935 regulations of the Dominion department were fairly well defined in this

respect and in 1936 the regulations were further strengthened so that they are now more specific than ever before.

At a meeting of the Canadian Association of Fairs and Exhibitions, the Dominion Live Stock Branch and the Canadian National Live Stock Records held in 1935, steps were taken to adopt more uniform entry forms and a more uniform system of taking care of the entries in the exhibition office, which step should assist materially in an improved check on exhibitors and exhibitions. Another factor involved in this picture was that most breed organizations have been endeavouring to improve their systems of animal identification, so it naturally followed that some effort should be taken to insure that the animal exhibited was actually the animal as represented by the certificate of registration.

As the matter stands at present there may still be further revisions required in practice and procedure, but the exhibition managements must insist on compliance with regulations in this respect and if they fail to do so the grant to their exhibition is liable to be withheld.

The question of tampering with livestock has also been a rather live question, but one with which it is more difficult to deal. The Dominion department regulations contain a clause to the effect that unnatural practices in fitting will not be tolerated, and all cattle entered for competition shall be presented in the judging ring in their natural conformation and natural physical condition.

Some attempt has been made at the Canadian National Exhibition, the Royal, and Calgary Exhibition to use officers of the Health of Animals Branch to examine the animals in the matter of improper practice. The difficulties in this matter are twofold: first, to find someone who can detect the evidence of improper practice, and second, to find someone who will take the responsibility for so doing.

The most constructive move which has hitherto been made has been undertaken by the Royal Winter Fair. They have retained Mr. Peter White, K.C., to draft regulations covering this question. At the last annual meeting of the Live Stock Records Board, Mr. White made the statement that efforts toward the control of matters of this kind had been of the crude or amateurish type. The exhibitions fear that they may be involved in lawsuits, hence their desire to place the onus entirely on Government officials. Undoubtedly the legal end and the proper phraseology will be perfected by Mr. White; then it will be interesting to see what responsibility will be assumed by the fair.

Governments have always been interested in having exhibitions function in such a way that the utility angle in our different breeds and classes of live stock would not be lost sight of and in this respect discussions have taken place from time to time with breed associations and fair boards in an attempt to develop classifications which will keep this object in the foreground. In recent years this pressure has taken the form of certain stipulations in the regulations pertaining to the percentage of prize money for each breed which must be allotted to group exhibits, such as "get of sire" and "progeny of dam" classes, and restricting the amount of prize money which can be paid to individuals in dairy and dual-purpose classes unless they possess certain production credentials. Similarly, restrictions have

been developed in regard to age limits for cattle to prevent the continuous showing of high class individuals for year after year in the breeding classes to the detriment of the individual, the breed and the owner himself.

These provisions have undoubtedly proved beneficial in maintaining a degree of balance between utility and show ring conformation which enhances the influence for good which the exhibition may exert upon cattle breeding. The strict utilitarian may be impatient with our progress when comparisons are made with systems for awarding prizes on breeding stock in other countries, notably Denmark, where the discretion allowed the judges is distinctly limited. It must be observed, however, that during the first ten years after the appearance of the milk recording societies in Denmark, it was optional for the cattle breeders to exhibit cows in the divisions for controlled yields or in the divisions without such control, and it is only since 1906 that it has been necessary to have cows controlled in order to obtain a prize. The essential difference in progress in my opinion lies in the fact that we in this country have featured record making more, through the use of a Government established Record of Performance system, while in Denmark they stressed cow testing through the medium of community organizations which take in over 44% of their farms.

In other words, our system tends to maintain improvement through discovery of the exceptional individual while they endeavour to effect a less spectacular but more widespread improvement in their dairy herds through a weeding out process on a large number of farms. Both policies may be termed successful from the standpoint of that for which they were designed. Our system produces outstanding animals and outstanding records which are essential in maintaining progress within a breed; what we need is a supplementary policy of herd improvement through a more widespread application of testing.

In so far as the dairy cattle classification of our shows is concerned I have one criticism which I would like to make, and that has to do with the premium which is placed upon timing of animals for the show ring, and the important position occupied by dry classes. The former, in my opinion, interferes unduly with good breeding practice and economic herd management, and the latter is responsible for spoiling a lot of potentially good females and increases the degree of speculation in awarding prizes.

I am taking this opportunity to make a suggestion which I appreciate has no weight of public opinion developed in its favour, inasmuch as I have discussed it with only a very few breeders, but I would like to see some show experiment with a classification which did away with all dry classes. Heifer calves, yearlings and two-year olds are frequently spoiled by overfitting and in many cases after winning in the junior classes, they fail to be heard of again. Similarly, in the mature dry classes, the difficulty in appraising properly the udders of the cows, in my opinion, makes the value of this class questionable. I appreciate the fact that the opportunity for paying expenses with prize money must be kept in mind and that other classes would have to be added to take the place of those eliminated. This, I would propose to do by means of extra milk classes. For example, have two or three classes of two-year olds in milk: (a) those newly freshened; (b) those that have been milking for a stated period; (c) all others milking.

The same division for three-year olds, four-year olds, and mature classes could be organized.

The advantage which I see in this classification is that it would remove the temptation to spoil junior animals through fitting, it would provide a breeder with the opportunity to show a good milking female of any age in its proper class, without undue reference to having them at the height of their fresh form for a particular show, it would mean that all udders could be appraised more accurately, it would turn out a larger showing of milk cows in a breed (which after all is what we are breeding dairy cattle for), and finally the show ring would not dominate breeding practice and the economic handling of the herd to the same degree as it does at present, thus affording to a wider field of good breeders the advantages of show ring participation.

The only disadvantage might be in regard to certain junior group classes, but I believe that something might be worked out in this regard, and it seems to me that the general benefits to be obtained from such a policy would in the long run far outweigh whatever temporary difficulties and hardships might be experienced. At the same time I appreciate fully that it is the type of change which would have to be worked over with one or other of the breed associations, and experimented with at a few shows.

Considerable criticism is heard regarding the false standards which are set in Beef Classes, where custom and practice have established a degree of fit far beyond that which is considered economic or desirable from the standpoint of the best commercial standards. Custom is a difficult obstacle to overcome inasmuch as it is established behind a bulwark of prejudices and misconceptions that are not easy to break down. There is encouragement, however, in the fact that our largest agricultural show, the Royal Winter Fair, last year included two classes for market cattle, which required the cattle to be killed, dressed and placed in carcass form. These classes excited considerable interest and comment, and if this type of effort is continued, there is good reason to believe that from the experience gained therein will come the establishment of new standards more in harmony with commercial requirements.

Similarly, the Sainsbury Cup Competition for bacon hog carcasses at the Royal is tending towards a more accurate appreciation of what is most desirable in a bacon hog class.

It may be impractical and impossible to develop these trials in new fields of show ring competition at all our larger shows, but in the measure to which they are proved successful their influence will spread rapidly throughout all our exhibitions.

On the crop side of our agricultural exhibitions I believe improvement has been accomplished through the medium of competitions in which the commercial end is stressed. Notable amongst such competitions are those for malting barley which were sponsored originally by private malting interests. Undoubtedly the educational value of the exhibitions in this field can be improved through better arrangement of classes for display and through more adequate labelling. Likewise this section will benefit through a display of farm products to a greater extent in commercial packages rather than in a variety of specially designated exhibition samples.

In this latter field particularly, county, district and township shows have a splendid opportunity to feature commercially those lines of endeavour which are most native to the community instead of adhering to the old cut and dried variety and sample classification which has been in use since the days of the first fair. The length of this report precludes further elaboration, but as an example of the class of endeavour referred to I might cite the new maple products exhibit at Sherbrooke Exhibition.

In conclusion, one of the most far reaching means towards improving our exhibitions has come about in recent years through the better organized provisions which have been made for juniors in many departments of the show. A special paper might be written on this one development alone. However, as I feel apologetic over the length of this report, I am going to leave the matter for future reports, in the certainty that whether they are made or not, the movement of junior participation now under way on a considerable scale at most of our exhibitions will in a few short years have established its own record in the way of exhibition improvement.

I am fully aware of the omissions and imperfections of this report; however the absence of any consolidated information on the subject, together with the limited amount of time which I have had to devote to its preparation have contributed very largely in determining its character —consequently, such analysis as has been made, must be considered as a preliminary review of the situation, presented with a view toward stimulating interest, thought and discussion.

BEEF CATTLE PRODUCTION—A PROBLEM[1]

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The most superficial consideration of present day conditions in Canadian livestock production will reveal the fact that the situation is vastly improved as compared with any period since 1930. This improved situation has not been developed through the operation of any economic panacea. While the preliminary observation may apply quite truthfully to the business connected with dairy cattle, horses, sheep, swine and poultry, it cannot be said to include, in the same sense, and at this time, the business of beef cattle raising. Briefly, it would seem that we must raise fewer (and better) cattle or find more market outlets.

EXPORTS OF LIVE CATTLE SINCE CONFEDERATION

Table 1 indicates just where our cattle have gone and in what numbers over a period of years:—

Table 1.—Exports of Canadian cattle

To	Great Britain	United States
1868	—	40,667
1869	—	61,967
1870	—	104,609
1871	—	77,550
1872	—	19,454
1873	—	22,391
1874	63	36,671
1875	455	34,651
1876	638	20,809
1877	4,007	13,851
1878	7,433	17,657
1879	20,587	21,316
1880	32,680	16,044
1881	49,409	7,323
1882	41,519	15,914
1883	37,894	23,280
1884	53,962	30,593
1885	69,466	67,758
1886	60,549	25,338
1887	63,622	45,765
1888	54,248	40,047
1889	60,000	37,360
1890 U.S. Tariff, $10 each	66,965	7,840
1891	107,689	2,763
1892	101,426	551
1893	99,904	402
1894 U.S.—20% ad valorem	80,531	356
1895	85,863	892
1896 Br. Embargo imposed	97,042	1,646
1897 U.S. Tariff: $3.75 a head; 27½% ad val.*	120,063	35,998
1898	122,106	87,905
1899	115,476	92,834
1900	115,056	86,989
1901	119,050	46,244
1902	148,927	31,743
1903	161,170	10,432
1904	148,301	3,517
1905	159,078	3,696
1906	163,994	4,726
1907	149,340	8,184
1908	124,015	23,612
1909 U.S. Tariff: $3.75 a head; 27½% ad val.*	143,661	16,130
1910	140,424	12,210
1911	113,795	7,576
1912	47,868	9,807
1913 U.S.—Free	9,878	180,383
1914**	—	145,722
1915	1,572	179,016
1916	—	104,227
1917	—	148,077
1918**	—	200,666
1919	159	453,606
1920	320	236,642
1921 U.S.—30% ad val.	33,053	135,257
1922 U.S. { Over 1050 lbs.—2¢ / Under 1050 lbs.—1½¢ }	18,475	189,760
British Embargo removed in 1922 and became fully effective on our exports in the following year.		
1923	57,672	96,873
1924	79,435	97,847
1925	110,868	86,748
1926	79,985	92,962
1927	8,263	204,336

[1] An address delivered before the sixth annual meeting of the Canadian Society of Animal Production—Eastern Section at the University of New Brunswick, Fredericton, N.B., July 14 and 15, 1936.

[2] Live Stock Commissioner.

TABLE 1.—EXPORTS OF CANADIAN CATTLE—*concluded*

To	Great Britain	United States
1928	405	166,469
1929	—	160,103
1930 U.S. { Over 700 lbs.—3¢ / Under 700 lbs.—2½¢ }	5,400	19,483
1931	27,149	9,159
1932†	16,568	9,010
1933	50,317	5,686
1934	53,852	6,341
1935	6,704	102,934
1936 Canada–U.S. Treaty:—Beef cattle, 700 lbs. up, not exceeding total quota of 155,799 head, tariff reduced to 2¢. Cattle weighing less than 175 lbs. each, not exceeding a total of 51,933 head, tariff reduced to 1½¢. Cows, weighing 700 lbs. or more each, for dairy, 20,000 head, at 1½¢. All other weights than mentioned, and any excess over quotas mentioned, pay the rates of duties as shown above for 1930 onward.		

*Cattle valued below $14 each, $3.75 per head; valued over $14 each, 27½% ad val.

**War Period.

†Ottawa Agreements: United Kingdom-Canada.

"(A) Slaughter of Cattle at Port of Entry

"The Parliament of the United Kingdom should be invited to amend the importation of Animals Act, 1922, so as to provide for the admission to interior markets and other premises of all Canadian cattle shipped to Great Britain irrespective of condition and sex, subject only to regulations similar to those which at present apply to the movement to interior markets and other premises in the United Kingdom of Irish cattle of the same classes. The United Kingdom would, however, retain the right to require the slaughter at the port of entry of any male or female animal considered by them to be below the desired standard for breeding purposes."

Under the above terms, which permit the United Kingdom the right to slaughter Canadian cattle which, in their opinion, are not desirable for breeding purposes, Canadian cattle do not enjoy similar privileges as Irish cattle. The regulations governing the entry of Canadian cattle into Great Britain have since been modified and are now as follows:—

1. Cattle must be segregated for one clear day before shipment. (Formerly 3 days were required.)

2. A tag bearing the letter "C" and a serial number must be affixed to the right ear. (Formerly required the ear tag and as well the right cheek branded with the letter "C".)

3. When tying up cattle on steamer, males and females may be handled together without distinction. (Formerly it was necessary to keep males and females separate; otherwise all would have to be slaughtered at landing port.)

4. The attendance of a veterinary officer on board the steamer is no longer necessary.

5. All cattle may now be landed at the same wharf, tied, sold in, and licensed out to inland markets or farms from the same lairages or auction rings. (Formerly it was required that breeding stock be kept in a separate lairage and slaughtered at the port of landing. From 1896 to 1922 all Canadian cattle had to be slaughtered at landing port.)

6. The British Ministry of Agriculture's port inspectors no longer have authority to classify steers as "fats" or "stores" and to require, when licensing the latter for movement out of the port market, that they be retained by the purchaser for 28 days before being offered for resale.

7. The Minister of Agriculture may require any Canadian cattle to be slaughtered within the port of landing place if, in his opinion, they could be used for breeding and are not suitable for that purpose.

PROBLEMS IN EXPORTING CATTLE

The reason for sudden falling off in volume of Canadian cattle exports with periodic shifts to alternative markets, must be evident even to the casual reader of Table 1. The whims and vagaries of our neighbours, in respect to tariffs, will be seen to have rendered difficult the establishment of a sound, safe cattle business in Canada. Nor has the alternative market, Great Britain, proven too satisfactory, due not alone to restrictions of one kind and another, but also to high marketing costs, low prices, the result of competition with beef the product of pastoral countries in the true sense, and, last, but not least, to the fact that Canadian shippers have not always catered to the preferences of their British customers.

The foregoing table and explanatory section showing exports of live cattle to Great Britain and the United States since Confederation, fairly well tells the story of our export trade to date, and may warrant further brief discussion. The outstanding fact, as commented upon, is that the changing fiscal policy of the United States in respect of import tariffs has militated against development of a permanent livestock production for

export policy. Changes in the tariff have largely determined whether our cattle would move south across the border or east and overseas to the British market. The outlet for our cattle in Great Britain has been for many years our alternative to the market in the United States. The long journey from the western range and feed-lot to British ports entails an overhead which often leaves little or no profit. The violent fluctuation in exchange during some recent years has constituted almost the balance between profit and loss.

It is interesting, historically, to note that during the period of the British Embargo, from 1896 to 1922, we made heavier annual exports of live cattle to the United Kingdom market than at any other time. The British Embargo did not impede the movement of cattle to British ports but did prevent the shipment of cattle inland. Under the Embargo, all cattle had to be slaughtered at port of landing. The removal of the Embargo permitted cattle to be moved to interior markets under licence, while the Ottawa Agreements further eased the conditions of entry, as will be outlined later in this memorandum.

Canadian cattle, however, are still entering the United Kingdom at a substantial disadvantage in comparison with Irish. The United Kingdom Government retains the right to require slaughter at port of entry of any male or female Canadian animal considered unsuitable for breeding purposes. Canada feels that, as part of the Empire and as a country notably free of epizootic diseases, she should receive similar consideration to that shown the Irish Free State.

As is well illustrated in Table 1, the volume of movement to the United States has been more or less a measure of tariff conditions or changing United States fiscal policy. For example, during the period from 1913 to 1920, when Canadian cattle entered the United States free of duty, we made the highest average annual exports of any period in our history. The subsequent imposition of a substantial tariff caused a sharp cut in exports, and further additions to the tariff in 1930 practically killed our southern trade. It experienced a strong revival in 1935 as a direct result of drought conditions across the border which raised cattle prices there to artificially high levels and which permitted Canadian cattle to hurdle the tariff and pay a profit.

The securing of the Canada-United States Treaty, operative from January 1, 1936, coincided with the gradual collapse of the United States artificially high prices as a direct result of one of the heaviest winter-fed cattle programs in the history of that country. The reductions secured in duty were very fortunate for the Canadian cattle industry. From the 1st of January to July 9, 1936, we had a market in the United States for approximately 126,000 beef and dairy cattle and 33,000 calves, which compares with approximately 88,000 beef and dairy cattle and 1,800 calves for the same period of last year. Exports continue on a liberal volume, but at lower rates as the year progresses.

Position of Our Cattle Trade with United Kingdom.

From January 1st to July 9th of the present year, we have exported nearly 18,000 head to the United Kingdom as compared with 4,817 for the corresponding period of last year. The British market has been more

favourable during May, June, July than at any other time since the winter of 1934, and the outlook promises, other than the usual seasonal dips, a reasonably favourable market. One of the greatest contributing factors to a profitable return has been the strong position of the pound sterling throughout the present year to date.

Beef Exports

The table of beef exports since Confederation shows that the changing United States tariffs have been less influential on our export trade in beef than on our cattle, with one exception of immediate concern, namely, the raising of the rate to 6¢ under the Hawley-Smoot Bill, 1930. The rate has proved almost prohibitive of export. The United Kingdom market has remained free. Probably the most important fact at the present time in connection with the beef export trade is that the Canada-United States Treaty, which substantially reduced the rate on certain classes of cattle, provided for no reduction in the tariff on beef which is now, as shown, at the high rate of 6¢ per lb. Inasmuch as Canada very badly needs an export outlet for a preponderance of beef from the rank and file of her cattle, which are ordinary in quality, the exceedingly high rate of duty is a very seriously depressing factor.

TABLE 2.—BEEF EXPORTS—NUMBER OF LBS.

	Great Britain		United States	
1868–90	Free	92,037	U.S. Duty Mar. 1883–1¢	491,619
1891–94	Free	675,128	U.S. Duty–2¢	5,270
1895–97	Free	1,920,661	U.S. Duty–20% ad val.	468,748
1898–1909	Free	1,995,382	U.S. Duty–2¢	84,011
1910–13	Free	571,290	U.S. Duty–1½¢	2,735,646
1914–21	Free	24,587,800	U.S. Duty–Free	21,978,683
1922	Free	6,231,900	U.S. Duty–2¢	18,583,600
1923–30	Free	3,420,987	U.S. Duty–3¢	22,383,625
1931–35	Free	4,897,480	U.S. Duty–6¢	1,453,440

Percentage of Total Liquidation of Cattle Export

The following figures show the percentages of the cattle sold off farms exported each year as mentioned:—

In 1921, Canada exported 13.9% of the total slaughter—Estimated.
In 1931, Canada exported 3.6% of the total slaughter—Estimated.
In 1935, Canada exported 7.5% of the total slaughter—Estimated.

Of the annual sales in exports and slaughter through public stock yards and direct to packers, exports were 44.9%, 11.9% and 19.7% respectively in the years as above.

PRESENT SITUATION IN BEEF

(1) The quota under the Canada–United States Treaty will, in all probability, be exhausted by the end of September. This will mean a loss of 1¢ per lb. in the price of Canadian cattle, in addition to the usual seasonal decline.

(2) Should the present unfavourable climatic conditions continue in the United States, they may result in an unloading of cattle in that country, to the further detriment of market prices, thus precluding any substantial demand for Canadian store cattle.

(3) If the movement south were blocked, there would be a heavy movement of western cattle east such as might demoralize the Ontario and Quebec markets, resulting in further lower prices all round.

(4) The British market during the present year has afforded a more favourable situation for export from Canada than obtained during 1934 when we sold the United Kingdom 53,852 head.

(5) Should further unsatisfactory conditions develop in the United States, pressure on available ocean space for export to the United Kingdom may be quite strong and there may not be boats enough on the present basis to take care of the late autumn demand.

(6) The high duty on beef imports into the United States precludes the shipment there of any substantial volume, and shipments so far this year are running far below last year's volume. On the other hand, there has been a substantial pickup to a moderate volume of exports to the United Kingdom.

The foregoing provides a somewhat sketchy background of facts relative to the present day situation in respect to Canada's export business in beef cattle.

Whether or not due to what has evidently in the past been an uncertainty of markets, or to the cost handicap involved by our geographic and climatic conditions as compared with those of pastoral countries or to other reasons that might be enumerated, the fact remains that Canada has had no well defined export policy in relation to beef production. We have certain facilities for producing cattle and we produce them. The comparatively high percentage of the mediocre kind constitutes a market drag. The price incentive has been discontinuous.

The Domestic Market

Realizing the difficulties with which the statistician has to contend in arriving at figures bearing on per capita consumption, and admitting that such information, as a result, cannot be reliable in all cases, Table 3 is presented.

Table 3.—Per capita meat consumption in Canada

Year	Beef and Veal	Pork	Mutton and Lamb
	lbs.	lbs.	lbs.
1920	67.1	58.1	10.5
1921	70.9	65.1	11.1
1922	72.9	74.5	11.3
1923	70.5	81.5	8.6
1924	70.0	87.7	8.4
1925	74.9	78.6	8.2
1926	70.0	75.2	5.9
1927	68.6	81.4	6.1
1928	67.2	82.4	6.4
1929	69.0	81.5	7.2
1930	65.7	72.9	6.9
1931	57.9	83.4	7.0
1932	56.0	85.6	6.9
1933	56.0	74.5	6.3
1934	67.8	66.3	6.2
1935	66.1	61.9	6.5

It may be observed that there are no very remarkable beef consumption trends in evidence during the period covered. Marked rises or declines in domestic consumption are frequently associated with or caused by a relatively high or low retail price index of the commodity, well illustrated, for example, in the case of pork consumption as contrasting the periods

1931–32 with 1934–35. In 1932, the weighted price of all hogs sold on stock yards was $3.92 and the domestic consumption rose to 85.6 lbs. per capita. In 1934, the weighted price was $7.70 and the per capita consumption fell to 66.3, and in 1935, dropped further to 61.9. The housewife is more affected by price than by quality, takes advantage of periods of low price in any meat by greater family consumption, and has in mind, always, the relative price levels of the popular meats. This leads us to a brief enumeration of some of the factors militating against increasing the use of beef in the domestic market, having in mind an increased demand for the product, with finally, better prices to the producer. Some of these factors may seem simple, homely and relatively insignificant—worthy of persiflage rather than serious consideration. Nevertheless, they are effective.

1. On the North American Continent there are millions of people on relief; tens of millions more not far from that level. They want cheap beef, can buy only cheap beef. The wholesale and retail buyer must cater to this demand.

2. Attention is drawn to the wide variety of "things to eat" now available to the public as compared to the opportunities twenty-five years ago, and to all the art and craft of salesmanship behind these food stuffs to-day. The average consumer, however, still has but one stomach.

3. Compare, for example, the net energy expended by the population at large, to-day, as against twenty-five years ago, having in mind the motor cars, time and labour saving vehicles, devices, and appliances of to-day.

4. There follows, naturally, a change in diet—more fruits, cereals, dairy products, more of a lot of "lighter" foods—and less beef.

5. The food faddists have been in full swing in the matter of inciting dietetic revolt, and not too many of them have advocated the greater use of beef.

6. The chemist has been one of the farmers' greatest helpers. On the other side, he may greatly change production and consumption trends. (See Harper's Magazine, August, 1935, or Readers' Digest, September, 1935,—"Chemistry Wrecks the Farm.")

Let us add to the above difficulties still another, of recent origin and serious in portent. Rising production and relatively passive or indifferent consumption trends in any commodity should, in time, effect a reduction in production or cost of same, if the producer is to stay in business. Read the following extracts from an editorial of unquestioned authority in the United States farm press:—

"The way is apparently being prepared for a disastrous cattle surplus in this country. When it comes, a large share of the responsibility will rest upon the Government. By measures, undertaken in the name of farm relief, it is accelerating the cattle cycle far beyond the normal rate and is exposing everyone involved to inevitable hurt.

"The *more vigilant* cattle producers realize what is going on. They have noted the figures of cattle increase, and they know by experience what to expect from more breeding stock and more people in the cattle business. And they *are alarmed over the Government-subsidized shift of millions of acres*

into more pasture and hay. All these conspire to create a combination that can have only one result, and that a bad one—more cattle.

"Between the two farm census-takings of 1930 and 1935 the number of farms on which there were cattle increased from 4,803,174 to 5,480,775. Virtually every section of the country showed a gain in the number of cattle."

"Rex Beresford, in charge of cattle production on the Iowa extension service staff at Iowa State College, pointed out that while Iowa had 3,516,000 head of cattle in 1930, that figure had been stepped up to 4,569,000 head in 1935—an increase of one million head. He also declared his belief that the AAA's production control campaign had given an impetus to an increase in cattle-raising."

"We now have sufficient cattle to supply domestic consumers, and any increase in the present supply will create a surplus, with inevitable price declines. The tendency to increase cattle to surplus supplies will be more pronounced if additional land is used, as it will be under this new plan unless it is so administered as to prevent that. This, in my opinion, presents one of the most serious situations with which the cattle industry has ever been confronted, and demands our serious consideration."

Nor are the developments referred to in the foregoing limited to the United States in their application. The farmer in Eastern Canada has two main or primary commodities to market—grass and hay. They are his chief raw products, one self-harvested by his animals, the other secured at his own labour cost. Mainly, they are marketed through cattle, and, in a lesser way, through horses and sheep. The pig helps not at all. The possibilities for further development and expansion of the dairy cattle industry are indistinct and possibly not too promising. Due to a variety of causes, enumeration of which is unnecessary here, more grass land is becoming available, or, rather, more land is reverting, in Eastern Canada, to grass. In an endeavour to harvest this crop, the farmer is prone to consider beef cattle. Their utilization seems to him the main avenue open. Witness, then the influx of Western cattle to Ontario farms in the fall of 1935, many of which cattle went to farms where beef cattle were formerly unknown. While it is true that rather special incentives prompted these heavy purchases of feeder cattle at the time mentioned, the fact remains that many of them were bought in an effort to utilize surplus grass and hay. Cattle seemed best suited to the job.

Meagre profits, and, all too frequently, serious losses have resulted and tend to discourage the utilization of cattle as a uniformly profitable solution to the problem. As in the United States, however, the tendency is toward increase.

The foregoing might possibly be condensed somewhat as follows:—

1. We now have the American market—our natural outlet—open to us. How long it may continue is subject to conjecture. It is certain that it will be controlled or limited by quota and regulation, and will be of lesser dimension than we desire. Beef is still subject to relatively high

tariff, which will likely remain in effect. In many quarters in the United States, strong objection is raised to the Canada-United States pact in respect to the agreement as affecting cattle.

2. We continue to utilize the British market for live cattle. The desire to limit Canadian cattle exports to small dimension is less evident. Recent shipments are much improved in quality. Canadian cattle fit well into the British beef subsidy scheme. Numbers of Irish cattle are down, and, generally, the season's prospects look favourable. Having all of this in mind, we are still confronted with the economics involved in shipping for thousands of costly miles a gross weight, live package, requiring feed and water carried in transit, fresh air, sanitary surroundings and care, subject to all of the hazards of land and ocean transport, and the risk and gamble of long distance trading. Our exports of dressed beef to Great Britain are negligible.

THE FUTURE?

If it be true that we have no well established beef or beef cattle policy involving export and domestic markets, has this been caused by lack of definite objective or incentive?

The Canadian bacon trade is no recent development, although it has attained a relatively prominent place since the Ottawa Agreements. The late Wm. Davies conceived an ideal or objective years ago—a Canadian bacon hog, different in type to the export product then entering Britain from America. In spite of pronounced difficulties, this type of bacon was retained and the export outlet for it kept open. Is it preposterous to consider something similar with beef? Much evidence is available relative to experiments carried on by commercial concerns and government agencies, and from the resulting reports it is clear that Canadian beef on the British market competes with foreign beef of high quality and relatively low price. Such is the product of pastoral countries of South America, and, more latterly, and in a lesser way, Australia. The field, however, is not fully explored, having in mind a product, say, of the lighter weights, that would reach the British market in the minimum length of time—in other words, utilizing the shipping period in lieu of the period which it would spend here in the cooler. Great Britain imports chilled beef largely with a declining volume of the frozen product. Canada should have the possibility of selling a product in Britain that is a step nearer fresh beef than is the chilled product. In point of age, or storage, it should be almost exactly similar to the product as distributed and sold here.

A market would have to be studied and built up, prejudices overcome, reliable volume and quality assured—all of which might require several years' time, and of a certainty, would necessitate subsidy during the period of development. Such a policy might supply the objective incentive.

We are apparently returning to a period of heavy marketings as illustrated by Table 4.

Our exports for 1936 should well exceed 200,000 head. When wheat is sold below cost of production or at low prices, Western Canada turns more to a more diversified output—cattle, dairy products, hogs, etc. During such periods, the West is responsible to some degree for "bulges" in production, particularly of cattle and dairy products. The wheat surplus may

disappear and wheat prices become more attractive in a world sense with a consequent concentration on wheat farming once more.

Table 4.—Canadian cattle exports to all countries

Year	Cattle	Beef in terms of Cattle*	Total
1919	467,642	225,218	692,860
1920	240,660	134,054	374,714
1921	174,552	64,284	238,836
1922	212,772	52,680	265,452
1923	160,771	45,542	206,313
1924	183,242	46,412	229,654
1925	204,378	69,254	273,632
1926	176,343	54,466	230,809
1927	216,209	113,480	329,689
1928	169,276	94,271	263,547
1929	162,632	62,132	224,764
1930	27,554	16,170	43,724
1931	40,217	7,512	47,729
1932	28,464	8,930	37,394
1933	59,158	20,012	79,170
1934	63,390	30,184	93,574
1935	112,771	27,022	139,793

* Taken at 500 lbs. ave. per carcass.

In the meantime, it is interesting to consider Canada's peculiar position as a supplier to Great Britain. As a producer, she is self-contained. Many of the great exporters to Britain (Denmark, Holland and other European countries) buy much of their feed on world markets and manufacture it into exportable products, notably bacon, at home. Canada grows her own feed, her own livestock — is dependent on no other country or affected by no international complication. Further, and in connection with beef export possibilities, Canada is at a lesser disadvantage in the matter of distance than are, for example, such countries as Argentina and Australia. It is conceivable that such consideration might be of peculiar significance in future international developments.

Our hope for the future seems to lie in:

1. The finding of an outlet for the product of cattle of mediocre quality which constitute a large proportion of our output, or—

2. An appreciation of the doctrine preached for years—that the right kind costs less to raise than the poor kind.

3. A greater appreciation of the better quality product—branded beef.

4. The further exploration and study of the possibilities of a beef export trade with Great Britain.

5. The possibility of wider or less restricted outlets to Great Britain and the United States.

6. Or, in the final analysis, as stated in the beginning, to raise fewer cattle or find more markets.

THE HORSE BREEDING SITUATION IN CANADA[1]

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The use and production of horses form an intimate part of and keep a fairly close parallel to the advance of farming. Horses, breeding and others, were brought over by French settlers in 1647 and 1670, at the very beginning of the farming area in Canada. From that date to this day, the breeding of horses expanded steadily, reaching its peak in 1921, but the trade, due in part no doubt, to the expansion of Western Canada, has always been from East to West until 1920 when it reverted Westward to Eastward.

From the last census, the population of horses in Canada has a value of $155,908,000 in 1931 and $168,132,000 in 1934. The population and distribution is shown in Table 1.

Table 1.—Summary of the distribution of horses in Canada, 1927–1930

Years	No. of head	Percentage by provinces								
	Canada	P.E.I.	N.S.	N.B.	Que.	Ont.	Man.	Sask.	Alta.	B.C.
1920	3,400,352	1.04	1.99	2.25	12.73	20.72	10.48	27.63	21,81	1.29
1925	3,554,041	0.92	1.50	1.43	9.71	18.12	10.12	32.91	23.91	1.35
1930	3,295,000	1.07	1.57	1.50	11.14	18.50	10.92	32.50	21.17	1.63
1934	2,933,492	0.93	1.43	1.74	9.01	19.93	10.09	31.78	23.80	1.98
	$168,132,000									

Table 2.—Number of horses in Canada from Census, 1871–1931

Census	1871	1881	1891	1901	1911	1921	1931
Number of horses in all Canada	836,743	1,059,358	1,470,572	1,577,483	2,598,958	3,610,494	3,113,909
							$155.908.00

Although there is no definite statistical data to guide one in making conclusions, it is safe to assume from local information that the average life of a horse does not exceed ten years after being broken to work, which means that Canada would have to produce approximately 300,000 horses annually to just maintain its supply without taking into consideration the possible markets either in the United States or Europe.

To maintain this production of horses, our farmers have had recourse to the use, when feasible, of purebred stallions. I say feasible, because in practice many grade or uninspected stallions are still used for service particularly in the Eastern Provinces.

[1] Report of the Chairman of the Committee on Horse Breeding before the seventh annual meeting of the Canadian Society of Animal Production (Eastern Section) held at the University of New Brunswick, Fredericton, N.B., July 14 and 15, 1936. The Committee consists of the following: M. J.-A. Ste. Marie, *Chairman;* Mr. M. W. Staples, and Mr. J. M. McCallum.

[2] Superintendent.

To produce these stallions or the stallions required, we have recorded during the last fifteen years the number of purebred horses for the six mentioned breeds as shown in Tables 3 to 5.

TABLE 3.—TOTAL NUMBER OF HORSES BY PROVINCES

Provinces	1921 to 1925		1926 to 1930		1931 to 1935	
	Registrations	Transfers	Registrations	Transfers	Registrations	Transfers
Quebec	884	752	1,016	1,187	1,350	1,851
Ontario	3,988	3,835	3,220	3,676	3,256	3,584
Manitoba	1,509	1,251	1,419	1,368	1,204	1,224
Saskatchewan	3,075	3,456	2,476	3,017	2,616	2,608
Alberta	2,581	2,231	1,967	2,128	2,124	2,268
British Columbia	198	170	207	134	291	221
New Brunswick	108	86	74	97	78	113
Nova Scotia	93	68	74	49	91	97
Prince Edward Island	56	41	51	57	108	98
Ancestors	824		1,152		34	
TOTAL	13,316	11,890	11,656	11,713	11,152	12,064

Table 4 shows that we have had a total purebred horse population of 36,124 registered and 35,667 transferred.

Of this population of registered purebreds, what is the actual number of purebred stallions in service and the number of purebred mares fit for or that are actually used for breeding? I am leaving this answer to you.

TABLE 4.—TOTAL NUMBER OF HORSES BY BREED FOR FIFTEEN YEARS (1921 TO 1935)

Breed	Registrations	Transfers
Belgian	2,636	2,963
Canadian	644	728
Clydesdales	15,213	14,839
Percheron	10,545	11,742
Standard Breed	2,662	3,027
Thoroughbred	4,424	2,368
TOTAL	36,124	35,667

Again what is the percentage of purebred male colts raised to three years of age that are finally accepted and retained for service?

May I, however, mention that approximately 15,000 stallions (20 colts per stallion) would be required to just maintain our horse population. This number would be the equivalent of 1500 stallions annually or about 500 for the Eastern Provinces.

I need not mention that we have not produced and are not producing that number. This explains the heavy annual expenditure of money for the importation of stallions from either Europe or the United States, besides the use of a large number of grades or uninspected horses.

The present great shortage of horses and their rising cost (all out of proportion to what the farmer has for sale) is causing a revival of interest to all parties concerned, the farmer, the purebred breeders and the government.

The writer has had occasion to analyse the various forms of governmental financial assistance given towards this phase of farming. The assistance given varies in many of the provinces for both the stallion owner and the farmer or the purebred breeder, and it is felt that it is not so much the

type or kind of assistance that is at fault if the breeding of horses of all kinds has been practised at a slow gait for the last ten years, but rather that shortage of money has not permitted the promotion of these policies as should have been done through more intensive educational campaigns.

Again owing to the heavy capitalization that the breeding of horses requires, the writer ask if it would not be possible to obtain more service from our veterinarians both private and governmentally employed to render this line of breeding a greater success.

The production of horses being a necessity, besides offering an interesting side line in farming, the writer submits for your consideration the above points for discussion.

TABLE 5.—TOTAL NUMBER OF HORSES BY BREED, BY PROVINCES FOR FIFTEEN YEARS (1921 TO 1935)

Breeds	Belgian		Canadian		Clydesdales		Percheron	
	Registrations	Transfers	Registrations	Transfers	Registrations	Transfers	Registrations	Transfers
Provinces								
Quebec	363	522	628	671	462	588	925	1,407
Ontario	174	297	13	48	5,265	5,684	1,536	2,328
Manitoba	208	258		3	2,165	1,805	1,302	1,415
Saskatchewan	1,013	1,185			4,038	3,901	2,661	3,544
Alberta	488	683	2		2,587	2,313	2,436	2,780
British Columbia	27	12			349	308	44	73
New Brunswick		3		3	81	88	68	131
Nova Scotia		3	1	3	70	70	23	37
Prince Edward Island					84	82	15	27
Ancestors	363				112		1,535	
Total by breed	2,636	2,963	644	728	15,213	14,839	10,545	11,742
Average by breed for 15 years	175.7	197.5	42.9	48.5	1,014.2	989.3	703.0	782.8

Breeds	Standard bred		Thoroughbred		Total number by provinces		Average by provinces for one year—per cent	
	Registrations	Transfers	Registrations	Transfers	Registrations	Transfers	Registrations	Transfers
Provinces								
Quebec	487	460	385	142	3,250	3,790	216.7	252.7
Ontario	1,187	1,589	2,289	1,149	10,464	11,095	697.6	739.7
Manitoba	144	217	313	145	4,132	3,843	275.5	256.2
Saskatchewan	312	352	143	99	8,167	9,081	544.5	605.4
Alberta	136	151	1,023	700	6,672	6,627	444.8	441.8
British Columbia	13	11	263	121	696	525	46.4	35.0
New Brunswick	108	71	3		260	296	17.3	19.7
Nova Scotia	163	101	1		258	214	17.2	14.3
Prince Edward Island	112	75	4	12	215	196	14.3	13.1
Ancestors					2,010		134.0	
Total by breed	2,662	3,027	4,424	2,368	36,124	35,667		
Average by breed for 15 years	177.5	201.8	294.9	157.9	2,408.2	2,377.8		

THE SIGNIFICANCE OF FAT IN THE DAIRY RATION[1]

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The significance of the percentage of fat in dairy cattle rations has not until recently given the animal husbandman very much concern. It is quite possible that he has not considered it enough in view of the changes that have taken place in the composition of some of the by-products commonly used in dairy rations.

The chemist's analyses of feeding stuffs include, among other nutrients, protein, carbohydrates and fat. We have been taught to regard these three nutrients individually and collectively with some significance. Recently, however, much important investigational work has been done in the field of proteins. The value of the various combinations of the twenty-odd amino acids, or building stones, that are found in different feeds and that go to make up the complicated family called proteins, has attracted most of our attention.

The importance given to the percentage of protein has, I think I am safe in saying, almost completely overshadowed our appreciation and the extension of our knowledge of fat. In this connection, it is not difficult to select cases such as linseed oilmeal, cottonseed oilmeal or soybean oilmeal as illustrations. The manufacturer continues to increase the percentage of protein in these feeds and the feeder on this basis evaluates them, and while doing so, probably fails to realize that as the percentage of protein is increased, the percentage of something else must decrease proportionately. With his more efficient methods of extraction, the manufacturer extracts more of the oil from the original seeds, its value being greater for commercial purposes, resulting in the high protein by-products, which we so extensively use in dairy rations, containing considerably less fat than formerly.

Not much thought has been given the fat content of the feeds that we use, either by the feeder or the nutritionist. There are various reasons for the more or less loss of identity in the case of fat, the two more important of which are, first, that it was early shown that certain fats could be readily synthesized from carbohydrates by the animal; and second, that in our attempts to simplify the application of what the chemist does tell us about feeds, we have converted the fat into net energy and total digestible nutrient values in such a way that probably we have masked its identity.

It is quite within the realm of possibility that fat may have more significance in the diet than merely being a source of heat and energy. In some of the recent feeding trials, it has been shown that a minimum of 4% of fat in the dairy ration yields milk and butterfat with economic acceptability as compared to the results of feeding rations containing 6 or 7% fat; while rations in which the fat was reduced by solvents to as low as 1% proved to be of considerably less value for milk and total fat production by dairy cows. As a result of this evidence, a general suggestion is made that *probably* the dairy cow will yield best when the percentage of fat in the ration is at the same level as found in the product she produces.

We hardly need to remind ourselves of the value of fat from the feeder's standpoint. The action of moderately high fat upon the palat-

[1] Report of the Committee on Dairy Cattle Nutrition before the seventh annual meeting of the Canadian Society of Animal Production (Eastern Section) held at the University of New Brunswick, Fredericton, N.B., July 14 and 15, 1936. The Committee consists of Prof. A. R. Ness, *Chairman*, and Mr. G. W. Muir.

[2] Professor of Animal Husbandry.

ability of the ration we appreciate from practice. When we desire a little extra fit or bloom upon the skin and hair coat of an animal, we turn to a feed in which there is a goodly amount of fat.

There was probably not as much likelihood of computing low-fat rations formerly as there is under present conditions. Although some of the farm grains, notably barley, are low in fat, any reasonable combination of oats, barley, wheat, corn with some bran and linseed oilmeal in which the latter has a 6 or 7% fat, would be reasonably high in fat. At present, however, when farm grown grains are quite extensively supplemented, it appears necessary to exercise great care when making feed mixtures from the available feeding stuffs to guard against a low-fat content. It is true that a minimum percentage of fat is required to be given in the case of an individual feed or mixture offered for sale. The difficulty with which even a 4% minimum can be maintained is becoming more and more of a problem.

One other observation of importance, and bearing upon the same problem, should be made. The text upon which we depend is undoubtedly "Feeds and Feeding" by Henry and Morrison. As a source of chemical analyses of feeds it is extensive. There are in this connection, two vital points about which we should be clear in using Morrison's figures for computing rations. It is quite possible that his figures do not apply very accurately to Canadian feeds, and in the new book by Morrison, just off the press, there is a wide range given for most of the by-product feeds listed. It has become very necessary, therefore, when computing rations that we make sure that we use the analysis figures that most nearly approach the individual feeds, or better still, obtain an analysis of the exact feeds to be used. This applies, of course, to nutrients other than fat, but to fat particularly, since we have chosen to think in terms of protein and T.D.N. in which the fat is definitely masked from view. The problem at the moment, therefore, is that a certain level of fat in the ration is necessary, that the significance of fat has been overlooked, and that with the low-fat content in many of the feeds used for supplementing farm grown grains, there is a likelihood that the dairy feed mixtures at present are below optimum in fat. The long distance problem, of course, is that we require information on the nutritional consequences of the administration, over long periods of time, of low-fat rations.

The following table is presented to illustrate the range in percentage of fat reported in a few of the widely used dairy feeds, and to show the ease with which errors can be made unless the exact analysis figures of the feeds to be used are available.

Feed	Henry and Morrison 1923	Morrison 1936	Feeds used in Canada
Cottonseed oilmeal	8.2 – 9.1	7.8 – 8.1	5.0 – 7.0
Linseed oilmeal	2.9 – 7.5	2.9 – 6.7	5.0 –10.3
Soybean oilmeal	6.6	1.6 – 6.2	1:0 – 8.7
Gluten feed	3.8	2.5	2.5
Fish meal	8.3	2.9 – 9.8	1.5 –11.2
Wheat Bran (all analyses)	4.4	5.0	3.6 – 7.3

ERRATA

In the article entitled "Digestibility studies with ruminants 11. Plane of nutrition and digestibility of hay-barley ration," by Watson, et al, appearing in Volume 16, No. 1, (September, 1936) of *Scientific Agriculture*, the following corrections should be made:

Page 14, Table 4, Column 4.
for ½ loge V read ½ $\log_e$ V
line 12, for I.8548 read $\bar{1}$.8548

Page 16, Table 7, Column 6.
for ½ loge V read ½ $\log_e$ V
line 4, for I.9128 read $\bar{1}$.9128
line 8, for I.9691 read $\bar{1}$.9691
line 22, for I.9583 read $\bar{1}$.9583
line 24, for 2.6704 read $\bar{2}$.6704

THE ECONOMIC ANNALIST

A REVIEW OF AGRICULTURAL BUSINESS PREPARED BI-MONTHLY BY THE AGRICULTURAL ECONOMICS BRANCH, DEPARTMENT OF AGRICULTURE, OTTAWA

Vol. VI, No. 5 October, 1936

THE ECONOMIC SITUATION

PREPARED IN THE AGRICULTURAL ECONOMICS BRANCH, DEPARTMENT OF AGRICULTURE, OTTAWA, LARGELY FROM BASIC DATA COLLECTED BY THE DOMINION BUREAU OF STATISTICS

Prices during the first eight months of 1936 recorded moderate gains over the same period of 1935, according to data compiled by the Dominion Bureau of Statistics. The index of wholesale prices of all commodities increased from 72.0 for the first eight months of 1935 to 73.1 for the same period of 1936. The index number of farm products amounted to 62.5 and 66.4 respectively for the two periods. Retail prices and cost of services increased from an index of 78.8 for the 1935 period to 80.4 for the 1936 period.

The index of farm products showed a considerable increase during July and August, rising nearly two points in the former month and seven points during the latter. The August figure was 73.3, showing a gain over the same month a year ago of 11.3. The disparity between the purchasing power of the farmer and the cost of retail goods and services he requires, as commented upon in the August issue of the ANNALIST, continues to show improvement with the August index of farm products at 73.3 and that of retail prices and cost of services at 81.2.

Physical Volume of Business.—Business activity remained steady. A slight increase occurred during June, but this was partially lost in July; in which month the index of physical volume of business stood at 110.0. Industrial production gained exactly one point in June over the index for May, but half of this gain was lost in July; mineral production and manufacturing showed slight declines while construction improved. Increased activity in the marketing of grains (with the exception of Barley and Flax) and in livestock marketing (excluding sheep) increased the agricultural marketings index from 73.9 in June, to 103.9 in July. Cold storage holdings which showed a considerable gain in June, decreased to the lowest index for the year, 137.5 in July. The general index of the physical volume of business for the first six months of the year showed an increase of 6.0 per cent over the first half of the previous year. The production figures for August were not available when the above was written.

Wholesale Prices.—The gradual advance in the general wholesale commodity price level which began early in June continued throughout July, and the index number of wholesale prices rose from 72.8 for the week ended 3rd July to 75.4 for the week of 31st July. Major gains were shown for grains, livestock, eggs and copper. A setback occurred during the second week of August owing largely to the reaction of grain prices on the general wholesale level, but increased demand for wheat toward the end of the month helped to make up much of the loss and carried the index back to 76.2 for the month. Livestock, meats, eggs and dairy products were mostly firm during August, as was also raw wool.

Retail Prices.—The acceleration in the rate of increase in food prices, which showed in the slightly increased index for July, continued during August and the index rose to 81.2. The food group rose from 72.6 in July to 74.7 in August; the

ANNUAL AND MONTHLY INDEX NUMBERS OF PRICES AND PRODUCTION COMPUTED BY DOMINION BUREAU OF STATISTICS

Year	Wholesale Prices 1926 = 100				Retail prices and cost of services (5)	Production (6) 1926 = 100			
	All commodities (1)	Farm products (2)	Field products (3)	Animal products (4)		Physical volume of business	Industrial production	Agricultural marketings	Cold Storage holdings
1913	64.0	62.6	56.4	77.0	65.4				
1914	65.5	69.2	64.9	79.0	66.0				
1915	70.4	77.7	76.9	79.2	67.3				
1916	84.3	89.7	88.4	92.3	72.5				
1917	114.3	130.0	134.3	119.6	85.6				
1918	127.4	132.9	132.0	134.7	97.4				
1919	134.0	145.5	142.4	152.5	107.2	71.3	65.5	48.1	47.1
1920	155.9	161.6	166.5	149.9	124.2	75.0	69.9	52.6	94.2
1921	110.0	102.8	100.3	108.5	109.2	66.5	60.4	65.2	86.4
1922	97.3	86.7	81.3	99.1	100.0	79.1	76.9	82.6	82.8
1923	98.0	79.8	73.3	95.1	100.0	85.5	83.8	91.4	87.6
1924	99.4	87.0	82.6	97.2	98.0	84.6	82.4	102.5	114.9
1925	102.6	100.4	98.1	105.7	99.3	90.9	89.7	97.2	108.6
1926	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0
1927	97.7	102.1	99.9	105.7	98.4	106.1	105.6	103.6	110.0
1928	96.4	100.7	92.6	114.3	98.9	117.3	117.8	146.7	112.8
1929	95.6	100.8	93.8	112.5	99.9	125.5	127.4	101.1	109.6
1930	86.6	82.3	70.0	102.9	99.2	109.5	108.0	103.0	128.4
1931	72.2	56.3	43.6	77.6	89.6	93.5	90.4	99.0	125.7
1932	66.7	48.4	41.1	60.7	81.4	78.7	74.0	114.3	120.1
1933	67.1	51.0	45.8	59.7	77.7	79.7	76.8	105.1	115.4
1934	71.6	59.0	53.8	67.7	78.9	94.2	93.6	88.5	114.2
1935	72.1	63.4	57.1	73.9	79.3	102.4	103.3	87.4	128.4
1935									
Jan.	71.5	61.4	55.7	71.0	78.8	97.5	97.8	30.6	143.7
Feb.	71.9	62.0	55.7	72.6	78.9	100.6	101.1	62.2	141.2
Mar.	72.0	62.7	56.4	73.3	78.8	94.2	93.3	65.4	143.2
Apr.	72.5	64.7	59.8	72.9	78.6	98.3	97.7	91.8	135.8
May	72.3	64.1	58.0	74.4	78.6	103.2	104.4	86.3	123.2
June	71.5	61.4	55.1	72.0	78.8	99.2	99.7	106.1	125.0
July	71.5	61.5	55.7	71.1	78.8	103.0	104.0	164.7	114.8
Aug.	71.6	61.8	55.5	72.4	79.4	107.9	110.3	163.9	117.0
Sept.	72.3	64.7	58.3	76.5	79.6	101.9	102.5	114.2	117.2
Oct.	73.1	65.8	59.3	76.7	80.4	107.2	109.5	86.6	119.7
Nov.	72.7	65.0	57.8	77.1	80.6	110.0	113.5	43.3	127.1
Dec.	72.6	65.4	57.9	77.9	80.6	106.2	108.8	34.0	133.4
1936									
Jan.	72.9	65.9	59.0	77.5	80.7	105.2	107.0	39.8	143.4
Feb.	72.5	66.0	58.9	77.8	80.4	104.9	104.9	62.7	150.3
Mar.	72.4	65.5	59.2	76.0	80.5	103.3	104.1	89.5	149.5
Apr.	72.2	65.0	59.8	73.8	79.8	108.8	109.2	115.8	149.3
May	71.8	64.8	59.9	73.0	80.1	109.7	110.6	110.0	144.5
June	72.3	64.5	60.8	70.7	80.0	110·3	111.6	73.9	171.9
July	74.4	66.3	63.2	71.6	80.5	110.0	111.1	103.9	137.5
Aug.	76.2	73.3	74.1	71.9	81.2	113.2	115.2	216.9	129.7

1. See Prices and Price Indexes 1913-1928, pp. 19-21, 270-289 and 1913-1934, p. 15.
2. Wholesale prices of Canadian products of farm origin only. See Prices and Price Indexes 1913-1934, p. 52, and Monthly Mimeographs 1934 and 1935.
3. Wholesale prices of grains, fruits and vegetables.
4. Wholesale prices of Animals and Animal Products.
5. Including foods, rents, fuel, clothing and sundries. See Prices and Price Indexes 1913-1928, pp. 181-185, 290-293. 1926 = 100.
Prices and Price Indexes 1913-1934, p. 117, and Monthly Mimeographs, 1934-1935.
6. Monthly Review of Business Statistics, p. 8, and Monthly Indexes of the Physical Volume of Business in Canada, supplement to the Monthly Review of Business Statistics, November, 1932.

sharpest rise since August, 1933, when prices first commenced to show definite signs of recovery. Higher prices were reported for a wide range of foods including meats, eggs, butter, cheese, bread, flour, potatoes and canned vegetables. No material changes occurred in other retail index groups.

Prices of Farm Products.—North American wheat markets were dominated by crop condition news. Toward the end of July, as it became evident that good supplies were lessening, export demand for Canadian wheat broadened extensively. Prices rose sharply and by the 30th, No. 1 Manitoba Northern cash wheat had topped the dollar mark. Quotations the following day reached $1.03\frac{3}{8}$ per bushel, the highest level since June, 1930. This marked a gain of $19\frac{1}{4}$ cents per bushel during the month. The advance continued during the first week of August and on the 5th, No. 1 Manitoba Northern cash wheat at Winnipeg closed at $1.10\frac{1}{4}$ in contrast to the low point from which the recent rise began of $73\frac{5}{8}$ cents per bushel on 26th May, 1936. Prices declined somewhat during the remainder of the month, with a temporary halt between the 11th and 18th, and the price on 31st August was $96\frac{1}{8}$ cents per bushel. Reports of less favourable moisture conditions in the Argentine created an active demand toward the second week of September and prices closed on the eleventh at $1.02\frac{3}{8}$. The overseas clearances and imports into the United States of wheat, from 1st August to 4th September, 1936, totalled 25 million bushels, compared with 13 million bushels for the same period a year ago.

A general decline occurred in the prices of livestock during the first part of August; but with improved pasture conditions, weekly receipts moderated and prices stiffened. Demand was sufficient to take care of offerings. Early August quotations for hogs strengthened owing to light receipts, but later, increased offerings of poorly finished grades led to general softening of prices. The butter market continued firm, and despite minor declines during the last week of August, closing prices were generally over 1 cent higher than the opening prices for the month. General strength characterized the egg markets, though Montreal and Toronto prices eased slightly during the middle of the month. August average prices were 4 cents higher per dozen for Grade "A" large. Cold storage holdings of eggs on 1st August were reported to be one per cent less than the previous month.

Prices in United Kingdom.—The index number of the prices of agricultural produce (1911–13 = 100) was 119 for August, as compared with 117 for July and 113 for August, 1935. If allowance is made for payments under the Wheat Act, 1932, and the Cattle Industry Act, 1934, the August index would be 124 and the previous month 121. Wheat, barley, oats, fat pigs, eggs, butter and hay during August showed an increase over the July prices, while values for fat cattle and potatoes showed a seasonal fall.

The Situation in the United States.—The retail food price index (1910–14 base = 100) of the Department of Labour for July was 137—a gain of 6 points over the same month a year ago. The wholesale price index stood at 118 in July compared with 116 for July, 1935.

PRIVY COUNCIL FINDS AUSTRALIA'S DRIED FRUITS ACT UNCONSTITUTIONAL

Regulated Marketing in Australia received a severe blow when, on July 17th, the Judicial Committee of the Privy Council allowed the appeal of the plaintiff in the case of JAMES V. COMMONWEALTH OF AUSTRALIA AND OTHERS. The validity of the Dried Fruits Act, 1928–35, was at issue and in finding the Act unconstitutional the Privy Council reversed a decision handed down by the Supreme Court of Australia some months ago.

Among the provisions of the Dried Fruits Act was one to the effect that the owner of dried fruits might not ship the product or deliver it for shipment in inter-State trade unless duly licensed. It was a condition of the granting of a licence that the licensee should export a certain percentage of his product. Mr. F. A. James,

the plaintiff, had refused to apply for a licence and a shipment of his fruit had therefore been seized.

The Counsel for the plaintiff argued that under the constitution of Australia, the Commonwealth could not restrict in any way the movement of goods as between one State and another. The decision of the Judicial Committee supported this contention.

It is interesting to note that the Act which was found invalid applied to inter-State trade only. In Canada, the power delegated to the Dominion Parliament under the B.N.A. Act to legislate with respect to the regulation of interprovincial trade has gone unquestioned, and the validity of the Dominion statutes respecting trade has been challenged mainly on the grounds of concomitant regulation of transactions within a province.

In addition to upsetting Australia's method of regulating the marketing of dried fruits, the Privy Council's decision will seriously affect her program with respect to other products, notably butter and wheat. A conference of the Premiers of the Australian States was convened late in August to discuss the situation. One solution, of course, would be a constitutional amendment which may be secured in Australia by a majority of votes in a majority of States.

MARKETING LEGISLATION IN NEW ZEALAND

C. V. Parker[1]

New Zealand was one of the first countries to establish the post-war commodity type of legislation for the marketing of agricultural products. A meat export Control Board was established by Act of Parliament in 1922. This was followed by the Dairy-Export Control Act in 1923, the Fruit-Control Act 1924, and the Honey-Export Control Act 1924. It is not the purpose here to give the reasons behind the development of this legislation, but merely to describe what has taken place in New Zealand in the way of marketing legislation, particularly during the last year or two. It is, of course, a well known fact that similar types of legislation exist in most countries of the world at the present time. Initial development, however, in most cases, has taken place at a later date than in New Zealand.

At least three stages in the development of the marketing legislation in New Zealand may be noted. From 1922 to 1934 each commodity affected was regulated under a separate Act by a Board established under the Act. For the most part these Boards were concerned with regulating exports. In 1934, the Agricultural (Emergency Powers) Act was passed providing for an Executive Commission of Agriculture with power to regulate marketing and production of agricultural products. This Commission was given power to take over all or any powers of the several commodity boards, the chief reason being to co-ordinate the work of the separate boards. Thus the feature of centralization was added to the legislative set-up, and greater scope was given to the regulation of marketing of domestic supplies. The latest development has been the passing of the Primary Products Marketing Act, 1936. This Act establishes a new government department known as the Primary Products Marketing Department which will take over the powers vested in the Executive Commission of Agriculture. The outstanding feature of the new Act, however, is the commencement in August, 1936, of government guaranteed prices for dairy products, and the provision of guaranteeing other primary product prices at a later date. Since the establishment of marketing legislation in 1922, there has been a tendency for greater governmental control. This tendency has been more apparent in the Acts passed in 1934 and 1936.

The Commodity Scheme.—Before schemes were made operative for the several commodities in New Zealand a vote of the producers was taken and at least a 60 per cent majority was necessary before regulations could be put into effect. Producers elected the majority of the members on the several boards which were established, the Government being represented by one or two members on each Board.

[1]Assistant Economist, Economics Branch, Department of Agriculture, Ottawa.

Commodity Boards have mainly confined their activities to the regulation of exports of commodities. The Fruit Control Act provided for domestic regulation of supplies, but as late as 1933 no district had such regulations in effect.

Briefly, the powers exercised by these Boards are: (1) Grading, handling, exporting and storage. (2) Shipment on such terms and quantities as they think fit. (3) Sale and disposal on such terms as they think fit. (4) Insurance against loss in storage and transit. (5) Exhibiting and advertising, and (6) experimenting to improve quality. The Boards also have power to make levies on exports to finance the operation of schemes.

Not all the powers conferred on Boards have been exercised by every Board. In some cases limited control has been exercised. Under limited control, Boards do not take possession of the products, but under absolute control they do and fix prices if they so desire. The Meat-Board has never assumed absolute control. The Dairy Board tried absolute control in 1926, with unsatisfactory results, while the Honey Board from 1923 to 1933 exercised limited control and then embarked on an absolute control trial. The Fruit Board obtained government aid in 1927 by way of a guarantee of minimum prices for apples. Until 1931, the guarantee provided little direct benefit to the exporters in the form of a cash return but in 1931–32, £19,171 were paid by the Government owing to a serious drop in fruit prices on the Continent. In 1934–35 the Fruit Board was empowered to establish a "Fruit Export Guarantee Fund" out of a levy, in order to enable the Board to make advances to producers at a maximum rate per case of fruit exported; the rate to be fixed by the Board.

Two Acts have been passed in the past two or three years setting up new commodity Boards. These are the New Zealand Poultry-runs Registration Act, 1933, and the Tobacco Growing Industry Act, 1935. The Tobacco Act provides for licensing of growers and the issuing of a special warrant before sales for manufacture or export can be made. Sale of tobacco at home and abroad is to be promoted and action in relation to imports of raw tobacco may be taken.

The Agricultural (Emergency Powers) Act, 1934.—The Dairy Board has taken a very active part in the development of marketing legislation in New Zealand. The Agricultural (Emergency Powers) Act, 1934, was the result of an investigation into matters affecting the dairy industry. Under this Act an Executive Commission of Agriculture was established with authority to co-ordinate the work of the several commodity Boards and to take over powers conferred on Boards by special Acts after consultation between the Boards and the Commission. Parts 2 and 3 of the Emergency Powers Act dealt specifically with the dairy industry. The Dairy Export Control Act, 1923, was changed in name to the Dairy Produce Act and a Board with an entirely new personnel was given powers to control butter and cheese operations within the country as well as export trade. The new Board met for the first time in April, 1935. Re-organization of the Dairy marketing Board set-up was still incomplete when the Labour Government was elected in the fall of 1935. The New Government pledged itself to a program of guaranteed prices with particular reference to dairy produce. Legislation was passed in the 1936 session of Parliament to implement these pledges.

Primary Products Marketing Act, 1936.—The Primary Products Marketing Act became effective on August 1, 1936. The purpose of the legislation is to protect primary producers from violent price fluctuations, and the method of accomplishing this is to have the government acquire ownership of products at fixed prices. For products intended for consumption in New Zealand the government may either acquire ownership at fixed prices or control sales and distribution. For the present the plan is only to be put into effect for dairy products and later it is intended to treat other products in a similar manner.

An entirely new Department of State, called the Primary Products Marketing Department has already been set up in New Zealand. This new Department has authority to take over all functions of the Executive Commission of agriculture.

The Department will have the power to take acquision of every primary product in accordance with the Act or any future lawful authority. It will have power to market, in New Zealand or overseas, any primary product whether acquired by the Crown or not. The Minister of the Department must approve of all contracts for the carriage by sea of any primary product intended for export. Another important function of the new Department will be to enter into negotiations with a view to making agreements to promote reciprocal trade.

Dairy produce is to become the property of the Crown as soon as it is placed, with the concurrence of the Department, on board ship for export. The Minister may determine by notice in the Gazette that ownership shall pass to the Crown at any specified time prior to shipment. This may be necessary if stocks are to be stored in New Zealand for any long period. Producers will be paid for dairy produce as soon as it becomes the property of the Crown. A deduction will be made for the New Zealand Dairy Board before payment is made.

Prices shall be fixed by order-in-council from time to time. Prices for export dairy produce shipped on or before July 31, 1937, shall be fixed after taking into consideration the prices received during a period of from eight to ten years immediately prior to July 31, 1935. After July 31, 1937, prices shall be fixed in accordance with prices fixed before that date and consideration will be given to the following matters:—

(a) The necessity in the public interest of maintaining the stability and efficiency of the dairy industry.

(b) The costs involved in the efficient production of dairy produce.

(c) The general standard of living of persons engaged in the dairy industry in comparison with the general standard of living throughout New Zealand.

(d) The estimated cost to the Department of marketing the dairy produce concerned, and also the cost of the general administration of the Act.

(e) Other matters deemed to be relevant.

Due regard shall be given always to fix a price that will enable any efficient producer to maintain himself and his family in a reasonable state of comfort.

OBJECTIVES IN THE ALBERTA LAND UTILIZATION SURVEY

G. H. Craig[1]

An adequate knowledge of the past uses of land and organization of agriculture is the first step in re-adjusting the farming system of any region. That some change is necessary seems obvious in the very dry areas of Alberta where extensive abandonment of farms has already occurred and relief assistance has been very often necessary. The general objective of the Alberta Land Utilization Survey is to define the regions in which the acute problems of land use exist, to discover the underlying causes of difficulty, and to point out those adjustments which seem to fit best the conditions of the area. With a more detailed and more accurate knowledge of the position of the maladjustments and their nature, the problem of land policy and administration is made much simpler, and the rate of re-adjustment accelerated. Natural forces are already bringing this about but only after a long period of unsatisfactory farm and community living conditions.

Many and varied factors have been responsible for the difficulties which are at present existent in the agriculture of the province. These can be most usefully classified into three groups: first, fluctuations and wide swings in agricultural prices; second, unfamiliarity with the nature of physical and other features both fixed in nature such as soil, and of variable type such as frost, hail, wind erosion and insect pests; and third, the factor of management and changes in the techniques of farming practices due to developments in the use of machinery, credit facilities and the like. These three groups of factors are not mutually exclusive but all play their part in varying degrees as they affect the changing use of land.

[1]Field Assistant, Economics Branch, Department of Agriculture, Ottawa.

The major interest of the co-operating agencies[1] in the land utilization study has been directed to the problems of the drought area where all three of the above factors have been particularly severe in their effect on farming conditions. The specialization of most farm operators in either wheat farming or range livestock production has been a source of much trouble. The prices of these two products have fluctuated as violently as any in the oscillations of the business cycle. Very high prices have encouraged the extension of wheat production into areas where only these high prices can be remunerative. At a later date, low prices have brought in their wake serious losses and consequent abandonment of much land upon which investments in buildings and other improvements had been made. In many cases too, a series of abnormally wet years has encouraged the purchase of land at high prices in areas where the average precipitation is not sufficient to return reasonable revenues even with normal price levels. The peculiar nature of wheat production, and periodic high wages of labour has encouraged the purchase on credit of a great deal of large scale machinery which has not always repaid the operator. Especially is this true when low prices and low yields have provided little surplus for the fixed costs in interest and depreciation on equipment.

The speed with which settlement occurred in many parts of the south has also occasioned much difficulty. At the time of first settlement land had equal and only a nominal value, and very few settlers were acquainted with the great variations in the productivity of the individual soil classes. Most of them considered the lighter soils preferable, and as a consequence the fine sandy soils were settled first and produced very well for a few years. However, as successive crops were harvested and periods of drought, insect pestilence and low prices occurred, these lighter lands became submarginal. They were early bought and sold at prices often higher than the heavier ones, but the changing productivity brought about a readjustment which now has left the sale value of these lands very low, and that of the heavier lands much higher. This changing productivity and changing land value has in itself been a major cause of variation in farming success between areas of different soil productivity. Many farmers are left with losses on the original purchase price of the land, while others who took up the heavier soils and the more fortunately localted parcels, have now received large increments through the increase in the value of their land.

It is to make clearer the geographical definition of the problem areas, and to clarify the nature of the problems that is the major objective in the study. The means used to discover the present uses of land and some history of past uses has been chiefly through the survey method. Sample districts are being studied with a view to determining the adjustments in farming practices and land use which will best fit the major soil and precipitation belts in the southern part of the province. During the summer of 1935 the area surrounding the towns of Vulcan and Lomond was chosen as useful for the purpose. In the course of the field work detailed schedules were obtained from about 500 farmers; information was collected regarding taxation, local government services, and relief from the municipal offices and other sources. This information is useful as a guide to determining the agricultural variations between a limited number of physical features and also between certain farm management practices as they apply in one region. During 1936 the project has been carried into another area which is distinctly within the drought region and which has been struck with extremely unproductive years since 1928. This latter is the Sounding Creek Area east of Hanna. Subsequently it is hoped to cover a large part of the area which has been subject to prolonged periods of drought and low yields. The data will be useful eventually as a basis for land classification defining the limits of the economic use of land for its most suitable purposes.

The final objective is therefore to place economic data on the soil map and maps of other physical features, in order to determine, insofar as possible, the most promising uses of land. This can only be done after an accurate analysis and inventory of the present and past conditions of land use has been made.

[1] The Prairie Farms Rehabilitation administration and the Economics Branch, Dominion Department of Agriculture, the University of Alberta, and the provincial Department of Agriculture.

SOME DATA ON THE CONSUMPTION OF MAPLE PRODUCTS

G. P. Boucher[1]

During the summer of 1935, the Economics Branch of the Dominion Department of Agriculture, in co-operation with the Department of Agriculture of the Province of Quebec, undertook a survey relating to the consumption of milk and cheese in the City of Quebec. While this survey was under way, a request was received to also obtain information on the consumption of maple sugar and maple syrup. Information relating to the consumption of maple products was obtained from 303 families. The analysis of the data obtained from these families shows that the per capita consumption of maple sugar was 2.77 pounds and the per capita consumption of maple syrup 0.54 gallons.

There appears to be some relationship between family income and the number of families consuming maple products (Table 1). The group of families using the largest proportion of maple sugar and maple syrup were those with a family income of $2,000 to $4,000 per annum.

Table 1.—Proportion of families using maple sugar and maple syrup as related to family income, 303 families in the city of Quebec, 1935

Family income	Number of families	Per cent consuming sugar	Per cent consuming syrup
On Relief	11	64	55
Less than $1,000	102	49	56
$1,000 to $2,000	107	73	79
$2,000 to $4,000	59	88	95
$4,000 and over	24	83	88
Total	303		
Average		68	74

A direct relationship appears to exist between family income and per capita as well as per family consumption of maple products (Table 2). The consumption by the two lowest income groups is smaller than the average consumption for all groups.

Table 2.—Relation between family income and consumption of maple sugar and maple syrup, 303 families in the city of Quebec, 1935

Family income	No. of families	No. of adults	No. of children	Total family	Consumption sugar		Consumption syrup	
					Per capita	Per family	Per capita	Per family
					lbs.	lbs.	gals.	gals.
On Relief	11	44	16	60	0.70	3.81	0.15	0.81
Less than $1,000	102	253	123	376	1.68	6.20	0.45	1.65
$1,000 to $2,000	107	387	257	644	2.58	15.52	0.52	3.14
$2,000 to $4,000	59	226	135	361	3.54	21.67	0.66	4.05
$4,000 and over	24	91	69	160	5.13	34.21	0.67	4.46
Total	303	1,001	600	1,601				
Average					2.77	14.64	0.54	2.84

[1]Field Assistant, Economics Branch, Department of Agriculture, Ottawa.

The highest consumption of maple sugar is found in the professional group and the lowest in the two labour (skilled and unskilled) and the relief groups. (Table 3.) The highest consumption of maple syrup is found in the farmer and salesman groups and the lowest in the two labour (skilled and unskilled) and the relief groups. The high consumption of maple syrup by the farmer group is, no doubt, to some extent due to the fact that the farmers who constitute this group are themselves producers of maple products.

TABLE 3.—RELATION BETWEEN OCCUPATION AND CONSUMPTION OF MAPLE SUGAR AND MAPLE SYRUP BY 303 FAMILIES IN THE CITY OF QUEBEC, 1935

Occupation	No. of families	No. of adults	No. of children	Total family	Consumption sugar		Consumption syrup	
					Per capita	Per family	Per capita	Per family
					lbs.	lbs.	gals.	gals.
Professional	37	144	66	210	7.96	30.18	0.67	3.81
Salesman	27	96	58	154	3.61	20.62	0.77	4.40
Clerical Workers	48	181	127	308	3.20	20.54	0.64	4.29
Large Business Executive	20	80	60	140	3.02	21.15	0.37	2.50
Small Business Executive	14	62	44	106	2.66	20.14	0.49	3.71
Skilled Labour	89	308	204	512	1.58	9.31	0.32	1.85
Farmer	9	53	23	76	1.13	9.55	1.00	8.44
Unskilled labour	48	179	80	259	0.94	5.12	0.22	1.18
On Relief	11	44	16	60	0.70	14.64	0.15	2.84

OTTAWA, September 16, 1936.

ASSISTANCE TO FARMERS IN DRIED-OUT AREAS OF PRAIRIE PROVINCES

Measures taken to assist farmers in dried-out areas in Alberta, Saskatchewan and Manitoba who are unable to winter all of their live stock holdings as summarized by Mr. R. S. Hamer, Assistant Commissioner of the Live Stock Branch, are as follows:—

1. The Dominion and Provincial Governments are co-operating with the railway companies in the delivery, free of freight charges, of lower grade cattle from the prescribed drought areas direct to packing plants in Western Canada, to be processed as boneless beef or as tankage. The two Governments are guaranteeing to producers a price of one cent per pound on all such cattle.

2. In order to assist in the movement of feeder cattle and feeder lambs from drought areas to areas in other parts of the Dominion where there is sufficient feed to finish them for the market, the Dominion Department of Agriculture will refund one-half of the freight charges on carload shipments purchased at country points within the prescribed areas. This assistance will be allowed only on shipments made between August 1st and November 30th. To qualify for the refund, the stock must be retained by the purchaser for at least three months in the case of cattle and two months in the case of lambs.

3. The Dominion and Provincial Governments are co-operating with the railway companies in absorbing all freight charges on feed which has to be shipped in to carry the remaining stock on individual farms within the drought areas, or in transporting such stock to outside areas in the prairie provinces where there is feed and in transporting such stock back to its original location next spring.

SURVEY RELATING TO THE CONSUMPTION OF MEATS IN CANADIAN CITIES

The per capita consumption of lamb in Canada is considerably lower than that in the United Kingdom and other Empire countries. The consumption of all meats in Canada is lower than it is in Australia and New Zealand. The opinion prevails that there is considerable variation in different parts of Canada in the consumption of lamb, veal, beef, bacon and other meats and it is believed also that the consumption of various meats differs in families of different national origins and with different family incomes. Few actual facts are, however, available on the variations in the consumption of meat in individual families in different parts of Canada. Basic economic facts on consumption are essential to the most intelligent production of the kinds of meats consumers require.

With the object of obtaining more accurate information than is now available on the consumption of meats, particularly the consumption of lamb and veal, a survey is now under way in the Cities of Saint John, N.B., and Montreal, and a similar survey will shortly be undertaken in the City of Vancouver. The Provincial Departments of Agriculture in the Provinces concerned are co-operating with the Economics Branch of the Dominion Department of Agriculture in these studies. Householders will be interviewed by young college graduates, most of whom have training in household science, and questionnaires relating to the use of lamb, veal and other meats, as well as the consumption of fish and eggs in the various homes will be obtained. Householders will be asked to state the quantity of different meats, fish and eggs used per month. Questions will also be asked as to the frequency of purchase of different meat cuts, the amounts purchased at one time, the foods which are substituted for meats, the opinion of householders as to the value of different meats, the number of times per day different meats are served and, where the consumption of any meat is low, the reasons why more of such meat is not purchased. The facts obtained will be related to the size of the family, the nationality and the occupation of the head of the family and to the family income.

An opportunity will also be given to each one who is interviewed to obtain information in the form of charts and bulletins of beef and lamb cuts and how to prepare them for consumption in the home.

In order to obtain some general information on the relation of diet and family income to health, the questionnaire blank also contains questions on the prevalence of colds and other diseases in the family, the health of the teeth and eyes of the children and, where possible, information will also be obtained regarding the height, weight and grade in school of the children.

It is expected that from 500 to 1,000 blanks will be completed in each of the three cities concerned. The survey will be conducted in such a way that a representative sample of the families in the various income groups in each city will be obtained.

COST OF MILK PRODUCTION STUDY

The four milk commodity producers' associations of Ontario along with the Economics and Dairy Husbandry Departments of the Ontario Agricultural College and the Economics Branch of the Dominion Department of Agriculture, Ottawa, have co-operatively initiated and are now actively engaged in a study of the cost of milk production. A dairy enterprise account book has been prepared and by means of a series of meetings throughout Ontario 1,516 milk producers have been enrolled in the project.

The accompanying alphabetical list of the counties of Ontario shows the number of farmers registered within each county and also designates the type of market to which the milk producers of the several counties ship their milk.

Supervision of the technical phases of the project is the responsibility of the Economics Branch, Ottawa, assisted by the Ontario Agricultural College, Guelph.

The account year extends from July 1st, 1936, to June 30th, 1937. In order to assist milk producers who are keeping the records and to assure uniformity of method, a field staff has been provided by the Ontario Agricultural College, Guelph, and the Economics Branch, Ottawa, to periodically visit the producers who are keeping the records of production costs.

At the conclusion of the year the records will be assembled for analysis.

MILK PRODUCERS OF ONTARIO WHO HAVE REGISTERED IN THE COST OF MILK PRODUCTION PROJECT—BY COUNTIES TO SEPT. 15, 1936.

—	Whole milk	Cheese	Concentrated milk	Cream	Total
Algoma	6				6
Brant	27		1		28
Bruce	1			1	2
Carleton	28	15			43
Dundas	2	16	31		49
Durham	13				13
Elgin	9	2	27	3	41
Essex	82			1	83
Frontenac	5	13	6	1	25
Glengarry	4	27			31
Grenville		6			6
Grey	18			3	21
Haldimand	1			18	19
Halton	52			2	54
Hastings	8	20			28
Huron	4		4	4	12
Kent	17				17
Lambton	18			11	29
Lanark	3	14		4	21
Leeds	4	40	16	1	61
Lennox and Addington	1	10	10	2	23
Lincoln	28				28
Middlesex	17	1	9	1	28
Muskoka	3				3
Nipissing	9				9
Norfolk	10		8	1	19
Northumberland	24	17		5	46
Ontario	90			1	91
Oxford	13	16	73	5	107
Parry Sound	16				16
Peel	37			2	39
Perth	9	2	11	2	24
Peterboro	19		3	6	28
Prescott		43	1		44
Prince Edward	6	3	3	3	15
Renfrew	2	2		12	16
Russell	6	20	3	1	30
Simcoe	31			8	39
Stormont	8	22	1		31
Sudbury	7				7
Victoria	16				16
Waterloo	49			1	50
Welland	32				32
Wellington	15			8	23
Wentworth	57				57
York	103			3	106
Total	910	289	207	110	1,516

LIFE INSURANCE CARRIED BY FARMERS IN THE LOMOND AND VULCAN DISTRICTS, ALBERTA

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Assisted by J. PROSKIE[1]

The following summary is taken from a study of life insurance carried by farmers in the Lomond and Vulcan Districts of Alberta. Data for the study were made available from the field sheets of an economic survey of 493 farms, conducted in 1935 by the Department of Agriculture, Province of Alberta, and the University of Alberta in co-operation with the Prairie Farm Rehabilitation Administration and the Economics Branch of the Dominion Department of Agriculture, Ottawa.

The two districts are in a semi-arid area directly north of Lethbridge and comprise about 47 townships with a total area of over a million acres. The farmers interviewed by the field enumerators in the Vulcan district occupied 31.8 per cent of the defined area; and in the Lomond area 43.8 per cent. As the number of records used in the study—493, represent 40 to 45 per cent of the total number of operators in the two districts, the conclusions drawn are representative of the whole. The chief cash crop in each district is wheat, and mixed farming is not practiced to any great extent. Both districts are served by the Canadian Pacific Railway and few farm operators are further than 15 miles from the nearest railway station. The whole area is traversed by graded dirt roads and a gravelled highway passes through the Vulcan district.

SUMMARY

During the early years in the development of a farming area, any surplus of earnings which may accrue in good years, is likely to be absorbed in improvements to buildings, equipment and stock, in increasing the size of the farm unit, or in raising the standard of living. In a well established district, farmers may be expected to have outside investments. Life insurance policies probably constitute the most important outside resource or investment. The amount of life insurance contracted and kept in force by farmers is, therefore, an index of the degree of success that has attended farming operations.

In the Lomond district, 14 per cent of the farmers had life insurance in force in 1935, compared with 42 per cent in the Vulcan district. In the joint Lomond-Vulcan area, 27 per cent of the farmers had life insurance in force.

The percentage of farmers with completely discontinued life insurance in the Lomond district, amounted to 29 per cent, compared with 19 per cent in the Vulcan district. For the area as a whole, the total amounted to 25 per cent.

Of all the farmers in the Lomond district, 57 per cent had never contracted life insurance at any time, compared with 39 per cent in the Vulcan district. In the Lomond-Vulcan area it amounted to 48 per cent.

The percentage of farmers without life insurance at the present time varied with soil types. The highest percentage was found on the Carmangay Fine Sand and the lowest percentage on the Fine Sandy Loam in the Vulcan district. In the Lomond district the highest percentage was found on the Fine Sandy Loam and the lowest percentage on the Armade Clay Loam. The amount of life insurance carried by farmers is influenced by the soil type on which the farm is located and thus those operators on the more productive soils carried a higher percentage of insurance.

Of the farmers without life insurance at the present time in the total area, married operators constituted 77.5 per cent. Of the insurance now in force by farmers in the whole area, 80.3 per cent was held by married operators. Life insurance was predominately contracted by married operators.

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In the Lomond district, 14 per cent of the owners, 2.4 per cent of the tenants and 18.2 per cent of the owner-tenants had life insurance in force in 1935, whereas, in the Vulcan district, 39 per cent of the owners, 36.8 per cent of the tenants and 48.8 per cent of the owner-tenants had life insurance in force.

Of the farmers with public school education, Grades 1 to 4, 23.4 per cent had life insurance in force; of the group with education, Grades 5 to 8, 34.1 per cent had insurance in force; of those with education Grades 9 to 12, 36.2 per cent had insurance in force; and for the group with Agricultural School or university education, 45.0 per cent had life insurance in force.

The present mean age of all operators was 49.5 years. The mean age for operators without insurance at any time was 50.5 years, compared to 49.5 years for those with insurance completely discontinued and 47.8 years for operators with life insurance in force. At the present time, approximately 75 per cent of the farmers are without life insurance and of this number 52 per cent are above 50 years of age.

Of the farmers in the two areas with life insurance in force, 12.12 per cent were in the negative net worth group. This group included 26.27 per cent of those who had discontinued insurance and 21.65 per cent of those who had never contracted life insurance at any time. There is a greater probability that life insurance will be contracted and continued in force by those farmers who on the average have higher net worth.

The group of farmers who have a higher standard of living—as measured by cash expenditure on living expenses—tended to keep their insurance in force. The group with the lowest standard of living had no insurance at any time.

In the Lomond district, of the group with life insurance in force, 62.50 per cent possessed radios, compared with 41.77 per cent of the group with insurance completely discontinued and 29.58 per cent of the group without life insurance at any time. In the Vulcan district, of the group with life insurance in force, 72.92 per cent possessed radios, compared with 52.17 per cent of the group with life insurance completely discontinued and 40.0 per cent of the group without life insurance at any time. Similar tendencies were found with regard to other farm services, *viz.*, automobile, electric light, fire insurance, septic tank and telephone. The farmers who were able to keep up farm services were also able to keep up life insurance policies.

The main cash income of the farmers in the Lomond-Vulcan area has been the sale of wheat. The purchasing power of the price of wheat from 1920 to 1935 in terms of premiums on $1,000 of straight life insurance taken at the age of 33 years, has varied from the low of 13 bushels in 1920 to the high of 61 bushels in 1933. These fluctuations and low level of the purchasing power of the farmers' chief source of income had made adjustments of financial obligations necessary, caused cancellations of insurance and impeded farmers from contracting life insurance during the last few years.

Total Volume of Insurance.—During the period 1896 to 1935, the amount of insurance contracted by the operators included in the study amounted to $911,700. Of this amount, 46.93 per cent was discontinued. The peak for the net amount in force, $639,100 was reached in the period 1926 to 1930. The peak for the net amount of life insurance in force in Canada was reached in 1931. In the period 1931 to 1935, the amount of life insurance contracted by farmers was 15.5 per cent of the aggregate amount for the period 1926 to 1930.

In the Lomond district, 61.1 per cent of the amount contracted was discontinued, in comparison with 38.26 per cent in the Vulcan district. The higher percentage of discontinuance in the Lomond district is accounted for by the fact that over the years, the Lomond district has been less productive than the Vulcan district.

Relation to Soil Types.—The comparative order and range of productivity of soil types is reflected by the ratio of the amount of life insurance contracted to matured, and in force per head for all operators. In the Lomond district, the extreme ratios were: Sundial Silt Clay Loam—1 : 0.80, Fine Sandy Loam—1 : 0.17. In

the Vulcan district, the extreme ratios were: Blackspring Silt Loam—1 : 0.92, Carmangay Fine Sand—1 : 0.45. The average yield of wheat in 1934–1935 on these soils were respectively: 13.1, 2.4 (Lomond), 16.4 and 5.8 bushels per acre (Vulcan). In the short run, the productivity of the soil under varying climatic conditions, determines the size of the farmers' cash earnings, which in turn decides the cash amount to be absorbed in maintenance of and improvements to buildings, equipment and stock, in maintaining or increasing the size of the farm unit or in increasing or decreasing the standard of living.

The farm is a social and economic unit. An increase in the size of family entails increased cash expenditures for living and without any corresponding increase in net earnings, the amount available for outside investment is decreased. It was found that the amount of insurance discontinued, increased at the rate of about 3 per cent per child up to the eleventh child. Apparently raising a large family is incompatible with keeping life insurance contracts in force.

Age, Size of Policy, Period Farming.—The mean age of operators when insurance was taken out, was determined for the group of farmers with insurance completely discontinued and the group with insurance in force. There was no significant difference between the respective mean ages. It is concluded in general, that the age at which insurance is contracted is in itself, not a factor determining whether life insurance will be maintained or discontinued. Adverse economic conditions effect all farmers without much respect for age.

In every five-year period from 1901 to 1930 in the Lomond district, of the policies contracted, the percentage discontinued exceeded the percentage kept in force. The reverse situation prevailed in the Vulcan district. Economic conditions in the Lomond district are definitely adverse to the maintenance of investments outside of the farm.

Policies of amounts of $1,000 and under were maintained in force for a longer period of years before being discontinued than policies of larger amounts. It is significant that some farmers were not in a position to maintain policies of small amounts.

With regard to the number of years operators had been farming when life insurance was discontinued, it is significant that 44 per cent of the farmers had been farming for 21 years and over, and that 56 per cent had been farming for 16 years or more. The variability of these data indicates the influence of other factors, such as tenure, and number of children in the family.

The amount of life insurance in force per head of population in the Vulcan and Lomond district amounted to 52 and 15 per cent respectively of the average amount in force in Canada for 1931. The amount of insurance in force per head of population in Canada in 1931 was $638.

In both the Lomond and Vulcan districts, 20-pay life was the principal type of insurance contracted by owners, tenants, and owner-tenants, followed by life and 20-year endowment types. In both districts a higher percentage of "straight life" was discontinued than of 20 pay-life or 20-year endowments. In the Lomond district, an average of $225 per insured person was outstanding on account of loans on policies, compared with $172 per insured person in the Vulcan district.

Of the insurance in force, the average amount of premium payable annually by owner-tenants was $147; by owners, $116, and by tenants, $63. The average amount of premiums payable by single operators was $158; by widowers, $121, while married persons paid $118.

CONCLUSIONS

In general, any surplus of farm earnings which may accrue in the good years, is likely to be absorbed at least partially, in the farm enterprise to meet the needs for maintenance of, and improvements to buildings, equipment and stock; to increase the size of the farm unit, and so raise the standard of living. In a well-established farming district, it is reasonable to expect that further surplus earnings will seek investment outside the farm. Life insurance policies constitute an important type

of outside investment made by farmers. The amount of life insurance contracted and kept in force per head of all operators on respective soil types, is one indication of the degree of success that has attended farming operations.

The amount of life insurance that has been kept in force by farmers varied from soil type to soil type, from district to district, with the tenure of the operator, the conjugal status, number of children in the family and net worth of the operator.

The record of the discontinuances of life insurance by farmers in the Lomond and Vulcan area, Alberta, suggests the necessity of a comprehensive class study of each applicant for life insurance as to his needs and ability to carry life insurance protection. The situation through the years which has confronted farmers in Western Canada with regard to fluctuating yields, prices, values and purchasing power, indicates the necessity for close study of life insurance requirements if a very high percentage of lapsed policies is not to be a common occurrence. What—if any—type of insurance policy has been, or can be developed to meet the particular need of Western Canadian agriculture, other than that type which has been prescribed for those engaged in other industries and professions?

The critical period during which life insurance is discontinued may be said to be during the first to fifth year. The probability of discontinuing insurance decreases as the insured builds up his equity.

The problem of lapsed insurance is not a new one, and is doubtless, well known to the executive officers of insurance companies. Amongst the major problems facing insurance companies, however, it is of first magnitude and demands that continuous research be directed towards its solution.

Life insurance, like all other commodities or services, can only be purchased by those who can pay for it. The record of discontinuances of life insurance in the Lomond and Vulcan districts, Alberta, indicates that there is a demand for life insurance on the part of those who cannot pay for it on the terms of the regular level premium companies. Life insurance protection for heads of families, for all elements of the rural population, is socially desirable from the point of view of the farm as an economic and social unit; for the protection of dependents and the satisfaction of possible creditors. But even with general economic recovery at a price level on a par with 1926, the chances are that a large percentage of the rural population will still not be in a financial position enabling them to carry life insurance.

ECONOMIC LITERATURE

DAWSON, C. A., Group Settlements: Ethnic Communities in Western Canada; Vol. VII, Canadian Frontiers of Settlement, edited by W. A. Mackintosh and W. L. G. Joerg. The Macmillan Company of Canada Ltd., St. Martin's House, Toronto, 1936, Pp. XX. 395 ($4.50).

In a foreword to this volume, Dr. W. A. Mackintosh states "among the many problems of settlement, there is none more interesting than that of the groups of 'peculiar peoples' who have sought in bloc settlements to preserve their religion and their ways of life". Throughout Western Canada, there are many of these groups. The presentation of a volume reviewing their experiences and appraising their accomplishments is timely and should be well received.

The discussion opens with the Doukhobors tracing briefly their origin and periods of freedom and persecution in Russia prior to their migration, some 7,400 strong, to Canada in 1899. The ensuing years of settlement in Saskatchewan, communal life, segregation of independents, invasion of non-Doukhobors settlers, migration westward to Alberta and British Columbia, religious and economic difficulties and opposition to educational requirements, are reviewed at some length.

Chapter III contains a brief analysis of farming trends in districts settled by Doukhobors with illustrations drawn from survey records supplemented by census data. Modes of living come in for some discussion, followed by a review of the conflict between sectarianism and secularism.

Mennonite settlement on the Canadian prairies comprises the second section of this volume. The existence of this group in Canada, according to the author, constitutes "merely the most recent phase in the history of a sect which during four hundred years, has passed through recurring cycles of unrest and migration to isolated areas". In the introduction to this section, Dr. Dawson contributes a description of the origin of sects. Following this, the treatment of subject matter is much the same as described for the Doukhobors. One notes that the process of assimilation is proceeding much more satisfactorily than in the case of the first named group.

The Mormons, described in the third section, are indigenous to this continent, having originated in the Eastern section of the United States during the early part of the nineteenth century. By successive stages of migration and recurring settlement, they moved westward until the region of Salt Lake was reached. Here they founded a colony that has prospered and expanded. The Canadian settlement in Alberta is a "daughter" colony that came into existence during the late 1880's. In 1931, the population of this colony totalled 13,185 and this constituted about 60 per cent of the adherents to this religion in Canada. The progress of the group in Alberta provides the basis for most of the discussion.

In the case of the German Catholic and French-Canadian groups, migration and settlement have resulted from individual initiative rather than co-ordinated mass movements. The settlements described are the result of an inherent desire of people to settle near others of the same language and religious affiliations. These have contributed to a solidarity of settlement and a uniformity of economic and social progress.

The author's conclusion, based upon statistical and visible evidence of progress, is that these various colonies "have been more than ordinarily successful". The nature of their organization, religious and social, contributed to their success and permanency but these very characteristics at times aroused suspicion and antagonism in the minds of those settlers who belonged to neighbouring communities and resulted in the bringing of "pressure to bear on governmental representatives to bring these blocs under school, homestead, and other regulations without delay or compromise". The "incorporation of these ethnic communities in the social and economic structure of the prairie region placed a heavy burden upon all its inhabitants", but in the long run "it seems clear from the evidence analyzed that the unplanned play of external forces . . . . . tends to eliminate much, perhaps all, of the distinctiveness of separatist colonies".

The treatment of subject matter throughout the volume is descriptive and analytical. A judicious use of illustrations, case records, survey material, census and other statistical data, contribute to the presentation and support the conclusions drawn.

INTERNATIONAL CONFERENCE AT ST. ANDREWS

The fourth International Conference of Agricultural Economists was held at St. Andrews University, St. Andrews, Scotland, August 31st to September 6th. The Conference was attended by about 250 delegates representing 23 countries. In his address of welcome, the President, Mr. L. K. Elmhurst, stated: "The object of the Conference is to foster the development of the sciences of Agricultural Economics and to further the application of the results of economic investigations of agricultural processes and agricultural organization in the improvement of economic and social conditions, relating to agricultural and rural life". Thirty countries are now represented by membership in the Conference. The fifth Conference will be held in August, 1938, at MacDonald College, Quebec.

Personal direction of the Alberta Land Utilization Study, 1936, is being assumed by Mr. Andrew Stewart, Department of Political Economy, University of Alberta, in continued co-operation with the Economics Branch, the Prairie Farms Rehabilitation Administration and the Alberta Provincial Government.